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ABSTRACT

Continuing education is needed for professionals in the library and information science areas so that they may provide the best possible service in a time of expanding knowledge and information delivery systems. The Continuing Library Education Network and Exchange (CLENE) is proposed as a result of a nine-month study completed for the National Commission on Libraries and Information Science. The functions of CLENE would be to (1) assess needs and define the problems, (2) coordinate and acquire information, (3) develop resources and programs, and (4) communicate and deliver the information and resource materials for continuing professional education. The organizational structure of CLENE would be in the form of a nonprofit corporation, with separate planning and policy, implementation, and evaluative units. The appendixes include survey instruments used in the study, survey results, lists of those interviewed, some alternative models, a position paper from the Association of American Library Schools Committee on Continuing Library Education, and a bibliography. (LS)

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CONTINUING LIBRARY AND INFORMATION SCIENCE EDUCATION

FINAL REPORT TO THE

NATIONAL COMMISSION ON LIBRARIES
AND INFORMATION SCIENCE

May 1974

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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CONTINUING LIBRARY AND INFORMATION SCIENCE EDUCATION

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FOREWORD

Librarians connect ideas and information drawn from all recorded knowledge with the needs of a single person. What librarians do, in fact, is exactly the opposite of what the big manufacturer, the mass communicator, or even the franchized fried chicken dealer does, since each of the latter strives to perfect a single product that will fit the wants of millions of people without much adjustment.

Librarians understand and appreciate differences of all kinds. Personalized application of knowledge to the needs of individuals, using materials in every known format, printed and pictured, linear and non-linear, is the core concern of librarianship. Yet the practitioners of this multi-faceted profession support and facilitate the development of the single product which is the economic ideal, even while on the other hand they provide relief from it with the antidote of choice, which is a human and social goal. The nature of librarianship is diversity and it requires the continuous adaptation of knowledge and skills to new situations. The librarian serves as both the doctor and the pharmacist to the mind and the senses, diagnosing and prescribing for the need, and filling the prescription as well.

Our society is presently faced with a serious gap in every field of endeavor, between available knowledge and its application. People are essential to the process of bridging this gap, and librarians and all library and information science personnel are the people charged with the responsibility of connecting people to the knowledge they need.

Librarians can only serve as conductors for others if their own practice comes reasonably close to fully utilizing all the knowledge they should have from a variety of disciplines. By commitment to regular, continuing professional education, librarians and other library and information science personnel can hope not just to "keep up" with the profession in which they started out, but to expand its mission to fit the expanding needs of the public. They must be able to frame the questions as well as to supply the answers relating to their social and professional responsibilities. If they would be change agents, they must themselves be continuously changing, trying on and growing into new roles, and setting new priorities in using time and other resources.

Librarians and those who work with them to develop library programs, must know something of the materials upon which they draw; the techniques for retrieving and delivering information; and above all, the people who will be on the receiving end. It is a three-pronged professional challenge of the highest order.

At various times, one or the other function of librarianship has been emphasized, and for centuries, the archival, preservation-of-material function was paramount. The small educated group of scholars who used libraries in the ancient and medieval worlds were quite fully motivated and skilled in using the material they wanted. Librarians were fellow scholars, who were expected to know, collect and care for books.

Early America gave a new look to libraries. The founding fathers gave them a push into their future by entrusting government to the ordinary citizen who would need to be informed to make it work. Thereby were public education and libraries, too, virtually mandated. Small libraries grew up at the edges of the frontier to feed the lively discussions from which pioneer Americans hammered out a nation.

What kind of background and training was necessary for helping everyday people to use the few books available? Generally, during the 19th century, and well into the 20th, the librarians most people knew best were gentlewomen, readers with a better than average education who shared their interests with others who came to seek. Thousands of poor youngsters climbed out of the underclass and into leadership on the narrow rungs these librarians provided. They learned the job by doing it, as did most lawyers, doctors and other professionals before the advent of specialized training.

Some big city libraries developed their own programs of inservice training for personnel on the job, but it was not until 1887 that the first library school, founded by Melvil Dewey, opened its six months' program of formal instruction in how to be a librarian, at Columbia College. Classification and cataloging, important steps to easier user access, were the chief subjects taught. Librarianship, struggling to find a professional hallmark, somewhat confused the means with the end, and for the next half century defined itself overmuch in terms of technical skills and processes. Along the way, librarianship became established as an area of graduate study, although for many it continued to be a part of an education leading to an undergraduate degree.

Then it happened. At about the midpoint of the century, at just the time when research had produced unprecedented amounts of new knowledge, millions of people with raised expectations appeared in the dark corners of society, where they had seemed all but invisible, to demand their human rights -- rights which depended rather often upon their having adequate access to knowledge, and help in applying it to their own lives. Librarians understood the implications for themselves of more to know, more people who must know it, and the dizzying rate at which all structures, all methods, all equations would change and keep on changing. Their response was to look for ways to harness the technology, to automate their technical tasks so that they might develop the third aspect of their professionalism: knowledge of the user, concern with his use of all media, print and non-print, and responsibility for motivating him to want to use them.

It is this greatest flowering of their professionalism that now presents an enormous challenge in restructuring education and skill training of librarians and for all library and information science personnel. Gone is any vestige of belief that professional education, or any that precedes it, prepares one for a lifetime of work. In a social and economic setting that will demand continuing education for all citizens, from entry job to retirement, librarians know that they face the necessity of planning to add regularly to their basic library education. A profession that is in a continuous process of changing roles, of redefining itself and its parameters requires constant rebuilding in every aspect of its competencies.

Graduate library schools have tried and are trying to squeeze into a master's degree program everything that is basic and specific about the principles that can be applied to the selection and evaluation of new media as well as old; everything they can about the classification and organization of information that makes for efficient retrieval and delivery systems. But both are aspects of library work that will require updating and revision as new methods and new planning are developed, and new kinds of materials come in a steady stream. With both these areas, library pre-service education does a good basic job, as well as providing groundwork in others upon which a librarian's work increasingly depends: administration, management and finance, communications, systems analysis, legislation, and many others. Every day, new fields are perceived as relating to librarianship, but there is no time for more than the merest introduction to most of these, or to the world of potential users that is constantly opening up, and how to assess and service their needs.

What of the Aging, around whom a whole new area of study is being built: 20,000,000 strong, and getting stronger, and as yet hardly touched as a group by library service? What of the mentally handicapped, millions of whom have been returned now to home communities, ready for the specialized services from libraries that will help them to make the most of their abilities? What of the functional illiterates, eagerly learning to read to that they may use libraries to read as well as to view and listen? What of the prisoners, no longer content just to "serve time" but determined to make it serve them, and count for something? What of the minorities whose language and cultural isolations need no longer be barriers to library use?

Librarians must learn to use non-print materials as valid and essential carriers to information and knowledge; they must learn to automate and simplify processes and free themselves for management of service to people; they must learn to organize for better access to resources, networks of service that cross artificial barriers; they must learn how to create an intellectual climate so open, so compelling that public apathy will vanish, and abuses of human freedom cannot take root.

As chief expeditor and facilitator of other peoples' continuing education in the future, the librarian must be continuously learning, too, as the body of knowledge and its applications both proliferate. It is librarians to whom the public must be able to turn for guidance in independent study, alternative education programs, and decisions and judgments which must be geared to the unfamiliar.

The learning necessary to encompass all of this, this branching out in a hundred new directions from a base of professional education, must be added segment by segment, as needed. It is what continuing education for librarianship is all about. To create awareness of need for libraries and then be able to interpret and satisfy those needs for millions of people, one by one -- these things can only be learned as a person, and a career, develops.

The essence of a profession lies in the blurring of the line between what one has to do to earn a living, and what one wants to do. Librarianship engages the whole self, and all one's skills. Librarians want to do well what they do, and to expand the scope of their opportunities for service. Most will embrace with enthusiasm the concept of continuing education, will know that when they are learning, their clients will be learning too, and will find great satisfaction in being real life models of learning behavior to young people and adults alike. Most librarians will welcome these guidelines in the spirit in which they are offered, to help them to get started, to firm up their commitment and structure a plan of their own making for continuing education that will help them to be the conceptualizers, the leaders they were always destined to become.

Virginia H. Mathews
Stamford, Connecticut

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The Project team wishes to express it appreciation to the National Commission on Libraries and Information Science for funding this study, and especially to Roderick Swartz, Deputy Director of the Commission, who monitored the study and gave many helpful suggestions toward achieving the goals set for the study.

This study is only possible because of the substantial investment in time on the part of the one hundred interviewees, the nearly two hundred respondents to the lengthy questionnaire, and the nearly one hundred people who participated in the charettes. Their ideas and suggestions provided a constant motivating force to the Project team throughout the nine months of the study.

We are greatly indebted to those leaders in continuing professional education outside the field of library and information science who gave generously of their time in lengthy interviews. They were able to bring an objective view to the study and gave us valuable direction in collecting literature and even supplied a large quantity of it. The Bibliography lists not only items cited in the text, but additional items of interest and relevance to the study.

Next we want to thank the members of the Advisory Board for the Project: Frank R. Birmingham, Ph. D., Program Leader, Instructional Media and Technology, Mankato State College; Frank Kurt Cylke, Chief, Division of the Blind and Physically Handicapped, Library of Congress; Dorothy F. Deininger, Associate Professor, Graduate School of Library Service, Rutgers University; Jack S. Ellenberger, Head of the Law Library, Covington and Burling; Edward G. Holley, Ph.D., Dean, School of Library Science, University of North Carolina; H. Robert Malinowsky, Assistant Director of Libraries, University of Kansas; Allie Beth Martin, Director of the Tulsa City-County Library System; Nettie B. Taylor, Assistant State Superintendent for Libraries, Maryland; Julie A. Virgo, Director of Medical Library Education, Medical Library Association; and Duane Webster, Director, Office of University Library Management Studies, Association of Research Libraries. The Advisory Board provided counsel throughout the course of the study and helped direct us to those knowledgeable in the area of continuing library and information science education. They all gave generously of their expertise without reimbursement.

We also wish to acknowledge the assistance of the many people from the field who took time to correspond with us and make suggestions and recommendations and to those groups who invited us to their meetings to discuss the objectives of the Project.

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Finally, we aknowledge the financial assistance and the office space provided for the staff of the Project by The Catholic University of America. The continuing interest of the faculty of the Graduate Department of Library Science during the progress of the study is also appreciated.

The study's principal investigators are: Elizabeth W. Stone, Ph.D., Project Director; Ruth J. Patrick, Ph.D., Associate Project Director; and Barbara Conroy, Research Associate.

Other staff assisting in this study are: Dhirendra Ghosh, of the Mathematics Faculty of Howard University, Statistician; Nancy Zeidner, Research Assistant and Secretary; Judith Senkevitch, Graduate Research Assistant; Judy Feldman, Editor and Support Staff; and Mary Feldman, Support Staff.

The Project team hopes that a new emphasis and interest in continuing education for library and information science personnel will result from this effort, and that those individuals and groups concerned about continuing education will work together at the local, state, regional, and national levels to accomplish the goal proposed by the Carnegie Commission on Higher Education in 1970: "Education should become more a part of all of life and less all of a part of life" -- in short, a lifetime learning concept.

Elizabeth W. Stone, Chairman
Graduate Department of Library Science
The Catholic University of America

Washington, D.C.
May 1974

INTRODUCTION

One of the field's prime national needs identified at the regional hearings of the National Commission on Libraries and Information Science was continuing education for professional librarians, library technicians, and library trustees.

This report and its recommendations are in response to the Commission's request for "a nationwide program of continuing education for personnel in the library and information science field." While it is offered as only the start of an on-going process of developing a nationwide program, its recommendations are the result of an intensive nine-month project, involving hundreds of persons in the library and information science fields.

Many of these persons participated in mini-charettes, in a written survey, or in personal interviews which addressed major issues such as: certification; organizational and individual incentives for continuing education; educational methods; and continuing education needs. The contribution of these library personnel cannot be overstated. Their collective wisdom and perspective have led the Project team to many of its major recommendations. However, as would be expected when such a large number of people are involved, there were differences of opinion, even as there are many differences of opinion reflected in the literature of continuing education emanating from the various professions. In the present study, most of these differences related to the input into and control over the policies of the national structure. Three alternative models which have been considered are outlined in Appendix D; alternatives to several specific features of the recommended model are presented at the end of Chapter 4. Throughout the text, when issues are presented on which there is uncertainty because of the intensity of opinions expressed, these areas are identified.

The proposed Continuing Library Education Network and Exchange (CLENE) is intended to provide easy access to leadership expertise, and program and resource assistance. It will provide a facility that can be useful and serviceable to both professional and paraprofessional practitioners at all levels of sophistication and need. It is designed to respond to individual needs as they are identified by those who are experiencing them and can respond on the terms required by the potential user. CLENE is a model for a service facility, programmed by, with, and for those to be served by it. While it is not seen as the complete solution to the challenge of continuing professional education, it is a conceptual framework within which solutions can evolve.

It is the belief of the writers of these recommendations that commitment to a program of continuing education, and experimentation with many forms and modes, will develop and strengthen leadership in the profession at all levels throughout the country. Hopefully, the most important function of the proposed facility would be to provide a framework for the evolvement of totally different and better techniques, products, and resources as needs are continually reassessed and fed in from the field, and as new needs develop out of the changing needs of the society. CLENE would concern itself with the development of the processes, and provide a base of support and data for the increasing number and variety of persons within the library and information science network who would be encouraged to become involved in continuing education innovation on their own.

The CLENE model suggests ways in which community, professional, and personal criteria could be met, and is based upon the philosophy that all library and information science personnel -- professionals, paraprofessionals, aides, and trustees -- should have convenient access to opportunities to continue their library and information science education from wherever their place may be on the career ladder. The Project team believes that local inadequacies in continuing education offerings should be minimized or even eliminated by new educational alternatives and technology.

The CLENE model reflects an especially great effort to respond to the highly person nature of continuing education choices by the individual in terms of content, time, place, sequence, pace, and the continuous, convenient availability of the quality and variety desired to enrich careers and make them more satisfying.

Finally, the CLENE model looks beyond the practitioners in librarianship and information science to the ultimate goal of continuing education in this field: the improvement of services to users, the upgrading to a new level of quality of library and information resources available to each resident of the United States so that every individual, regardless of geographical location, may reap the full benefits of competent, responsive service.

Thus study, report, and recommendations are presented with the rationale, alternatives, and documentation which have led to the CLENE model. The full spectrum of the field is invited to utilize this information as an inspiration and perhaps as a workbook in the development of continuing education opportunities -- this -- so the personnel in the field will be better equipped to fulfill their missions of providing for the informational needs of their client populations.

The Project team invites the reader to read, to study, to become involved. It is the hope that this report will be the first step of an evolutionary process that will continuously provide equal access to coordinated, quality educational opportunities throughout the country for all library and information science personnel who need and want to continue their lifetime of learning.

XIX

Highlights

From The Final Report Of The

Continuing Library and Information Science Education Project

Submitted by

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A PROPOSED

SERVICE AND RESOURCE FACILITY

FOR CONTINUING EDUCATION

August 1974

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CLENE

OVERVIEW OF CONTINUING LIBRARY EDUCATION NETWORK AND EXCHANGE: CLENE

ULTIMATE GOAL: QUALITY LIBRARY AND INFORMATION SERVICE

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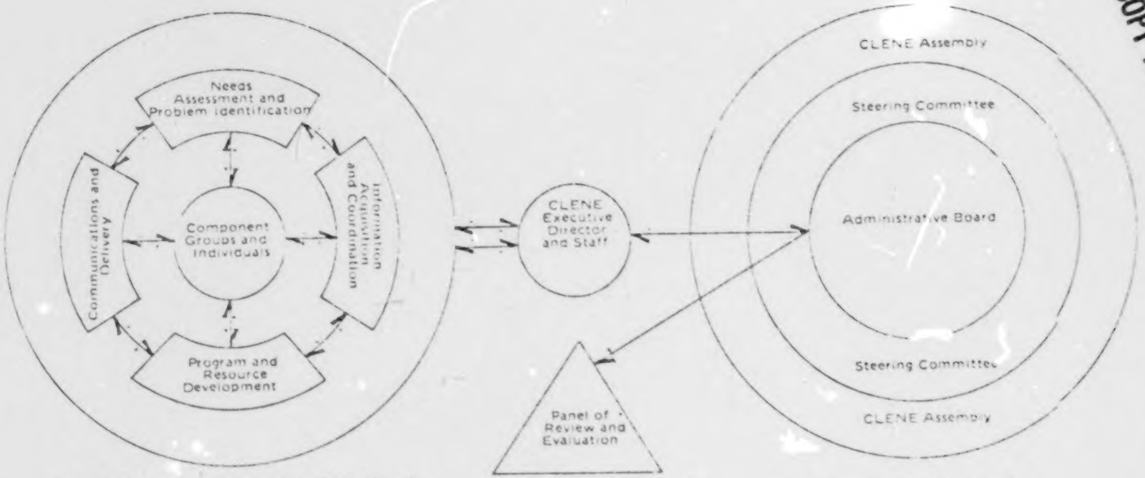
Needs Assessment and Problem Identification
Communications and Delivery
Component Groups and Individuals
Information Acquisition and Coordination
Program and Resource Development
CLENE Executive Director and Staff
Panel of Review and Evaluation
CLENE Assembly
Steering Committee
Administrative Board
Steering Committee
CLENE Assembly

CLENE, Processes serving the individual and local, state, regional, and national levels of the library and information science community.

Representative Structure of CLENE

What Needs To Be Done (Processes)	*Who Needs To Be Involved*
Needs Assessment and Problem Definition Information Acquisition and Coordination Program and Resource Development Communications and Delivery	Individuals Associations State Agencies Library Schools Libraries Information Centers Interest Groups

How CLENE Initiates, Supports, and Facilitates Its Getting Done	
Functions	*Part of CLENE Responsible*
Planning and Policy	Assembly Steering Committee Administrative Board
Implementation	Director and Staff
Evaluation	Panel of Review

FIGURE 1

A PROPOSED
SERVICE AND RESOURCE FACILITY
FOR CONTINUING EDUCATION

A new organization, the Continuing Library Education Network and Exchange (CLENE) is the basic recommendation of the nine-month study highlighted here and detailed in the full final report to the National Commission on Libraries and Information Science (NCLIS). The study suggests starting points in the ongoing process of developing a highly diversified nationwide program of continuing education for library and information science personnel at all levels of sophistication and need.

THE OVERVIEW

The ultimate goal of CLENE is the improvement of library and information services for the nation. The model described in the following pages incorporates elements identified by research as necessary criteria for a successful nationwide program. These include:

-- To actively encourage widest participation possible by all levels of library personnel in every aspect; participation at the grass roots is vital.

-- To involve those being served by the continuing education program in the decision-making process.

-- To establish flexible working relationships between participating individuals and groups--national, regional, state and local.

-- To provide for the continuing assessment of needs.

-- To acquire, process, store, retrieve, and disseminate information about existing programs, resources and services.

-- To produce and disseminate materials, resources and programs to meet specific high-priority needs of individuals and groups.

-- To concern itself, through activities and policy statements, with current issues affecting libraries and continuing education.

-- To maintain liaison with other professions for the purpose of promoting and exchanging continuing education ideas.

Figure 1 overviews the proposed structure for CLENE--its focus, relationships, functions and personnel. Underlying this model is a philosophy that emphasizes lifelong, self-motivated learning. Within this philosophy, the basic missions of CLENE are stated as follows:

(1) To provide equal access to continuing education opportunities, available in sufficient quantity and quality over a substantial period of time to ensure library and information science personnel and organizations the competency to deliver quality library and information services to all.

(2) To create an awareness and a sense of need for continuing education of library personnel on the part of employers and individuals as a means of responding to societal and technological change.

WHAT NEEDS TO BE DONE

As shown in Figure 1, the work of CLENE is focused in four areas, the four basic processes identified by the study are described briefly below.

Process One: Needs Assessment and Problem Definition

The first major process is aimed at continuous assessment of individual and group needs for continuing education and at the definition of problems. The approach to the accomplishment of this process is through "consumer participation." The model suggested by the study consists of five components: (1) identification of needs in relation to job performance; (2) awareness of facilitators of and barriers to continuing education; (3) selection of high-priority objectives as related to desirable library service and feasibility; (4) selection and organization of learning activities that will produce and sustain effective performance; and (5) evaluation of the extent to which the continuing education activity meets the expectations of the people associated with it.

The final report of the study presents detailed suggestions and emphasizes that the needs assessment and problem definition process is basic in assuring the relevance and direction of the other three processes.

Process Two: Information Acquisition and Coordination

The second major process is the acquisition, coordination and exchange of information about existing continuing education resources in library and information science and other professions that are applicable to needs and problems. CLENE would process this information, store, retrieve and exchange it in order to provide equal access to it for those persons who have need.

The information gathered would include available programs or resources that can be used to develop programs, the time and place of scheduled programs, background materials, surveys, and studies. The pros and cons of a centralized record system for proof of participation in continuing education activities are also discussed in the study report.

Process Three: Program and Resource Development

The planning, design, production and evaluation of CLENE services fall in this area. Its first level represents the facilitative aspects of CLENE with precise descriptions of what is available and functional in delivering continuing education opportunities to library and information science personnel. The second level of activity of the program and resource development process works with consultative help to develop new program specifications and new resources. Some possibilities that might be utilized include: (1) series of transportable programs; (2) packages of continuing education materials; (3) self-instructional learning courses; (4) audio-cassette tapes; and (5) special task forces for high priority areas such as technology competence development.

The national office of CLENE could serve as a gathering point and depository for information on new technologies with demonstrations, model training packages and descriptions of innovative uses of new technologies in continuing education. An example of this type of demonstration is provided by the Educational Facilities Center in Chicago.

Process Four: Communications and Delivery

The fourth major process involves creating an awareness and sense of need for continuing education of library personnel on the part of employers and individuals; planning ways and means to deliver the materials to the user who needs them; and actively encouraging interest, use and evaluation of materials disseminated.

The study report suggests various media for mass and person-to-person communications and emphasizes both the solicitation of feedback and its input to the program and resource development process to improve future programs.

ORGANIZATIONAL STRUCTURE

The recommended organizational components of CLENE are an Assembly, a Steering Committee, an Administrative Board, a CLENE Executive Director, a small central staff and a Panel of Review and Evaluation (Figure 1). Planning and policy-making functions are assigned to the Assembly, Steering Committee and Administrative Board and representatives of the library and information science community at large. Implementation functions rest with the Executive Director and the staff. Evaluation functions are carried out by the Panel of Review and Evaluation. A brief description of each recommended organizational component appears below.

The Assembly is made up of representatives of all relevant groups. It provides a forum for the exchange of ideas in library and information science continuing education, provides a means of making recommendations at the national level based on wide involvement of all those concerned throughout the profession, serves as an ongoing communications network, and elects the CLENE Steering Committee.

The Steering Committee has responsibilities for such functions as identifying problem areas based on grass roots input for the attention of the Assembly, identifying priorities for CLENE, suggesting policy alternatives, reviewing and promoting the coordination of the various continuing education efforts, providing communication between the states on continuing education matters, and electing the Administrative Board.

The Administrative Board has responsibility for formulating policy, long-range planning, determining the major processes or activities in which the CLENE staff channels its efforts, establishing policy guidelines for staff-administered programs, authorizing studies and research, and identifying problem areas for the attention of the CLENE Executive Director and staff. The Administrative Board appoints the Executive Director and the Panel of Review and Evaluation; it also authorizes the formation of other advisory or technical committees or task forces that it may deem necessary.

The Executive Director of CLENE employs the necessary staff members to carry out the four processes of CLENE and administers the activities of the staff. The CLENE staff carries out the activities on a day-to-day basis in keeping withe the policies set forth by the Steering Committee and the Administrative Board.

In consultation with the Administrative Board, the Executive Director appoints special task forces or advisory committees as directed by the Board. The Executive Director is authorized to employ, subject to the approval of the Administrative Board, ad hoc groups of experts to organize, facilitate and innovate programs to meet priority needs as these are identified through the needs assessment and program definition process, if these are not already met by existing programs. The Executive Director is authorized to solicit funds for the operation of CLENE and for research necessary to carry out projects.

The Panel of Review and Evaluation is an external assessment system appointed by the Administrative Board, as mentioned above, and reporting to it; it is made up of individuals of recognized expertise. The Panel critiques the internal evaluation system of CLENE, gathers data which would validate the internally gathered data and makes judgments about the overall effectiveness of CLENE.

IMPLEMENTATION

In accord with recommendations in the full study report, the NCLIS decided in summer 1974 to publish the report and to give wide distribution to the present summarization of highlights from the recommendations. Further, in its continuing role as catalyst, the NCLIS is calling together in national conference a select group of participants from professional organizations, library and information science education and various levels of library and information science services. The conference, at this writing scheduled for late October, is intended to identify leadership groups, develop courses of action and discuss financial support.

An organizational issue with long-range implications that must be resolved in the initial stages of planning is the institutional environment for the operation of CLENE. The study considered some alternatives--university, Federal agency, state government, professional association, and private corporation--and concluded that CLENE would be implemented most effectively by creating a nonprofit corporation with the following characteristics:

-- A corporate charter to work for the collective benefit of all those served.

-- A "private enterprise" type drive to survive by producing programs, publications and services that are purchased because they are of high quality.

-- A national status that is widely recognized by all groups involved in the partnership.

-- A collectively financed program with funds contributed by local and state governments, Federal agencies, associations, employers of library and information science personnel and private institutions.

-- Provision for a close-working relationship with the people providing continuing education at the local level and those served at the local level.

-- Purposes such that CLENE would be in Section 501(c)(3) of the Internal Revenue Code of 1954 and so recognized by the Internal Revenue Service so that funds could be obtained from foundations and individuals tax free.

The study report includes some detail on various implementation issues and alternatives and puts special emphasis on a flexible long-range financial policy with a mix of public, private and self-support funds.

A FINAL WORD

The purpose of the present document is to communicate, in very brief form, the study's major recommendations for organizing and implementing effective continuing education for people in library and information science careers. It presents an overview of the recommended service and resource facility, CLENE, and highlights the rationale on which the suggested goals are based.

This brief document is not a summary of the entire study nor a substitute for it. In fact, the NCLIS hopes that readers of this prospectus will be encouraged to study the full report.

CHAPTER 1

A NATIONWIDE PLAN TO MEET THE INFORMATION NEEDS OF THE PUBLIC

BACKGROUND OF THE STUDY

The information needs of a public searching for personal effectiveness, as workers, as members of families, as citizens taking part in the affairs of their communities, and as individuals fulfilling private aspirations and potentialities are great and increasing. The needs of the public start with the establishment of literacy and go on to an almost infinite range of activities including: problem-solving; advancement of culture and civilization; creation and utilization of new technology; and enhancement of individual lives through growth and development.

The ultimate mission of the nationwide plan for continuing library and information science education proposed in this study is to provide optimum library and information services for every resident in the United States. One essential ingredient to assure movement toward this goal is the provision of competent personnel in the institutions designed to provide for informational needs throughout the country. Continuing education is necessary to maintain and increase the competence of those who work in libraries and information centers.

The intent of this study and report is to recommend a plan for continuing education of librarians and information scientists. The problem addressed is a large one:

> -- how to provide acceptable means for making continuing education opportunities available in sufficient quantity and quality over a sustained period of time in order to assure personnel and organizations the competency to deliver quality information service to all residents of the United States.

In 1972, the National Commission on Libraries and Information Science conducted a series of regional hearings aimed at identifying the concerns and opportunities involved with meeting the nation's future information requirements. One of the priority needs identified repeatedly by members of the information community related to the availability of continuing education that would allow development and maintenance of the competencies needed to deliver the information services required by the social, institutional, and research activities of the nation.

This Project and its recommendation is, thus, a response to the Commission's request for "a nationwide program of continuing education for personnel in the library and information science field."

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WHY CONTINUING EDUCATION?

Society needs information to get its business done. The various components of our society need information for technical and scientific application, for making sound management decisions in both personal and business worlds, for dealing with social problems, and for creating meaningful artistic expressions.

Individuals and organizations throughout the society assume responsibility for knowing its information needs and for providing ways to meet those needs. Those individuals are the personnel who staff those organizations. The competence of those information-oriented individuals and organizations is essential to assure the society's needs for information are met.

Adequate career preparation for individuals is important. In our rapidly changing world, continuing education -- opportunities for learning throughout a career -- becomes the key to improving and maintaining the competence of those individuals and organizations responsible for providing information in the society.

Not an end in itself, continuing education is a prime means of making the most of that valuable and expensive resource -- people. People are essential to the process of connecting the need for information and the information resources. People have to be prepared to acquire, organize, and deliver information in fields which do not remain static in terms of their needs or operation. People have to be able to effectively manage these information organizations to provide for society's need to know. People have to know how to responsibly raise and deal with issues confronting their own professional field, to resolve them in humane and effective ways, and to persevere on matters involving professional principles.

Continuing education provides opportunities to update knowledge, skills, and abilities we need. Continuing education is necessary to enable us to see and define problems and then proceed to solve them effectively. Continuing education is necessary for us to prepare for and cope with the changes that will come about. Continuing education is essential if we are to survive as individuals or as a professional field.

Continuing education for the public as a whole, as well as for library and

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information science personnel specifically, is vitally important, as spelled out by Calkins (1967):

> Continuing education is no longer merely a good and worthy thing for self development; it has become a national necessity....it has become indispensable to the effective operation of our free society...and the management of the multifarious public affairs of the country...no one in these times can go far on the intellectual capital he acquired in his youth. Unless he keeps his knowledge or skill up to date, revises it, adds to it, enriches it with new experiences and supplements it with new ideas as they displace the old, he is soon handicapped for the duties of the day.

NATIONWIDE PROBLEMS CALL FOR NATIONWIDE LONG-RANGE PLANNING

What is urgently needed for the future is a conceptual and practical blueprint for the provision of equal access to coordinated, quality educational opportunities throughout the country for library and information service personnel who need to continue their lifetimes of learning in order to better serve the needs of the public. The objective of continuing library and information science education is the specific enhancement of the competence of personnel at all levels -- professionals, paraprofessionals, other supportive staff, and trustees. Recognition of the importance of continuing education has been increasing in recent years, and library schools, library associations, national and state agencies, and individual libraries have been accepting increasing responsibility in the area of continuing education. But in spite of this increased concern, there seems little likelihood that the present separated efforts of component groups will be able to meet the requirements, even though available knowledge and tools from the combined fields of library education, the behavioral sciences, and communication technology are immediately at hand. Present separated efforts seem unlikely to correct unequal distribution of opportunities for continuing education or to be able to develop distribution systems that are efficient in terms of need.

Present programs present a wide range of individual choices, but the fragmentation and scattering of these efforts leads to duplication, or worse, to failure to effectively meet the individual needs of practitioners. These problems in continuing library and information science education are nationwide. Therefore, national long-range planning is necessary, leading toward a network and exchange system, which will articulate, facilitate, reinforce, and extend the efforts of local, state, regional, and national associations, college and university library education programs, and employing libraries -- including state and national libraries.

A partnership incorporating the abilities of major resources available for library and information science education can produce a strong program available to all library and information science personnel, which none of the current efforts can provide separately. The opportunity for building a system that will prove effective calls for:

1. Re-examination leading to a delineation of what needs to be done to assure the continual effectiveness of library and information science personnel throughout the 70's and beyond to meet the needs for service demanded by society

2. A translation of these ideas into an administrative partnership that will provide the best learning resources to all library and information science personnel, whatever level they may be in the profession and wherever they may be located geographically

3. An administrative partnership that will provide for continuing policy, planning, and coordination at a national level

4. Utilization of the tools offered by modern technology to reinforce the learning-teaching process

CONTENT OF THE REPORT

After a description in the next section of this Chapter of the methodology used in this study, the content of the report is presented in three chapters. Chapter 2 presents "A View from the Field," in which the term "field" includes perception gained from the data gathered through the survey instruments used in this Project and from a review of the continuing education literature in library and information science and other professions.

Following a statement of definition and scope of coverage of continuing education in library and information science, factors which have been found to be essential to take into consideration in the design of any continuing education system are ennumerated and briefly discussed.

Next is a section on opinions of what the content of continuing library and information science education should be as presently viewed from the field, but with the emphasis made that there needs to be continuous assessment of needs in order to assure that content is relevant to society's problems at any given point in time.

Under the section on the format of continuing education, both modes and methods are discussed. Emphasis here is on the use of instructional technology and its applications for continuing education.

Chapter 2 also describes the efforts of the Project team, using personal interviews and a review of the literature of other professions, to find a prototype of national dimensions and components that would be applicable to a nationwide system for continuing library and information science education. The Chapter concludes listing some of the possible responsibilities for the members of the nationwide partnership of continuing library and information science education, as identified by the participants in the study.

Chapter 3 describes the Continuing Library Education Network and Exchange (CLENE) which is the Project team's proposed model for a nationwide program of continuing library and information science education. The first part of this Chapter describes the organization structure of CLENE, which consists of five components: the Assembly, the Steering Committee, the Administrative Board, the CLENE staff, and a Panel of Review and Evaluation. The second part of the Chapter describes the four Processes of CLENE -- the types of activity in which CLENE will engage. These are:

Process One:	Needs Assessment and Problem Definition
Process Two:	Information Acquisition and Coordination
Process Three:	Program and Resource Development
Process Four:	Communications and Delivery

The fourth Chapter, entitled "Implementation Plans," presents recommendations for initiating CLENE. It also suggests alternative institutional environments and alternative financial policies for CLENE.

The Introduction also serves as the Conclusion, in which the hope is expressed that the ideas presented in the model of CLENE will stimulate discussion (which will lead to refinement and modification), and will eventually lead to an implemented system which will ensure the mission of the effort -- optimum library and information services to every resident in the United States.

RESEARCH METHODOLOGY

To fulfill the major objectives of the Continuing Library and Information Science Education Project -- those of obtaining information on the current status of continuing education and putting forth recommendations for a nationwide plan of continuing education -- three survey instruments were used: a questionnaire, an interview guide, and a mini-charette. Each was designed to meet specific information needs and was directed toward individuals best prepared to supply the data. The findings from the survey instruments were related to, and integrated with the findings from the literature review and analysis and the discussions with the Advisory Board.

The Project Director was Elizabeth W. Stone, Chairman of the Graduate Department of Library Science, The Catholic University of America, Washington, D.C. Other members of the Project team were Ruth J. Patrick, Associate Project Director; Barbara Conroy, Research Associate; and Dhirendra Ghosh, Project Statistician. The Project team was assisted by an Advisory Board composed of persons knowledgeable in the field of continuing library and information science education and representatives of major groups concerned about continuing education for library and information science personnel.

A guiding principle throughout the Project has been to involve as many people as possible in it, with the hope of building on their expertise and experience.

DEVELOPMENT OF THE THREE SURVEY INSTRUMENTS

Each of the three survey instruments was designed to meet specific information needs and was directed toward the persons best prepared to supply the data. Copies of the survey instruments are presented in Appendix A.

Development of the Questionnaire

The objective of the questionnaire was to gather information and opinion on existing and future continuing education from library and information science personnel having responsibility for continuing education, and to discover unmet or poorly met needs in continuing library and information science education. The questionnaire was sent to the heads of the organizations in each group listed in Table 1.1. This Table also presents the number in each group and the response rate.

TABLE 1.1.

GROUPS PARTICIPATING IN QUESTIONNAIRE SURVEY AND THEIR RESPONSE RATE, 1973

GROUP NAME	NUMBER IN UNIVERSE	NUMBER IN SAMPLE	NUMBER OF RESPOND-ENTS	PERCENTAGE OF RESPONSE
Complete Sample				
Libraries--national	3	3	3	100
Library associations--national	38	38	24	63
Library associations--regional	7	7	4	57
Library associations--state	51 *	51	29	57
Library schools--accredited	51	51	40	78
State library agencies	51 *	51	39	76
Subtotal	201	201	139	69
Partial Sample				
Libraries--academic	... **	12	9	75
Libraries--public	... **	13	9	69
Libraries--school	... **	13	8	62
Libraries--special	... **	12	8	67
Subtotal	...	50	34	68
Library schools --unaccredited	250 ***	20	16	80
Total	...	271	189	70 ****

* Includes the District of Columbia

** The exact number of libraries in these four categories is not known, but is estimated to be approximately twenty-four thousand

*** Estimated, as exact number is not known

**** There was a 74 percent total response rate, but 4 percent of these responses were received too late to be included in the tabulations, but comments to open end questions were used.

Of the 11 groups, the complete universe of six groups was used, because of the importance of these groups and because the universe was manageable. It was beyond the purpose and scope of this study to survey the universe of the remaining groups; therefore, the Project team selected participants suggested by the Advisory Board, using the criterion that they be actively involved with, or concerned about, continuing library and information science education programs.

In the preparation of the questionnaire, the formats of instruments successfully used in other major studies were reviewed. This included the series of continuing education studies conducted by Dr. Samuel S. Dubin and his associates at Pennsylvania State University, the Continuing Education for R & D Careers, sponsored by the National Science Foundation in 1969; and the Continuing Continuing Education for Public Service: A Design for Action for Education and Training for Public Service, carried out by the Institute for Local Self Government in Berkeley, California, in 1971. Also, the Project staff met with Dr. Dubin for one day and reviewed the first draft of the questionnaire.

In addition, the two questionnaires prepared by the Project Director in the summer of 1972 for surveying continuing education as it exists in Library Schools accredited by the American Library Association and in library associations and their results were considered.

Development of the Interview Guide

A second major task of the Project was to interview a selected group of educators, administrators, researchers, working professionals, and paraprofessionals, and authorities in the field of continuing education -- either in library and information science or in other disciplines -- who could provide informed opinions and comments on the subject of continuing education. The objective of the interview, in addition to supplementing information collected through the questionnaire, was to obtain ideas and opinions on the organizational structure that a plan for continuing education might incorporate. The Project team also felt that the interview would provide an additional type of feed-back and interface best obtained through a one-to-one conversation.

Two interview guides were developed -- one for the interviewee and one for the interviewer -- and they were designed so that the interviews could be conducted either on a person-to-person basis or by telephone.

The guide for the interviewee indicated the general topics to be discussed; the guide for the interviewer indicated in addition major topics of information to be probed during the interview. The interview guides were used as a check list to ensure that all major areas of concern were covered during the interview. Since the persons being interviewed varied in their knowledge, experience, and background, the interviews were adapted to make best use of each interviewee's expertise.

The persons to be interviewed were sent a written request describing the purpose of the interview and of the Project and asking if they would be willing to participate. They were asked to return an enclosed form, indicating whether or not they would be willing to participate (only one person declined to be interviewed). A copy of the interview guide was sent to them at the time of request for an interview to acquaint them with the general topics to be covered in the interview.

Development of the Mini-Charette Instructions

The Project team decided to include a "mini-charette" technique in order to utilize the existing Continuing Library Education Network (CLEN) already established through the efforts of the Association of American Library Schools' Committee on Continuing Library Education. This technique was chosen as a way of increasing the amount of information obtained for use in making the Project's recommendations.

A cover letter described the background of the Project and asked members to organize mini-charettes in order to come up with ideas for designing a conceptual and practical plan for the provision of equal, coordinated continuing library and information science education opportunities. An excerpt of that letter describing the mini-charette technique, follows :

> "Charette" is a term borrowed from architectural and art usage. Literally it means "chariot" or a "little cart." The little carts were used by art students to carry their paintings to Paris. As they moved along the country roads, the farmer, the butcher, the baker, the washwoman, and everyone else would suggest improvements -- a little more red here, a little less green there. In other words, everyone got into the act. In architecture, the term has been applied to a marathon designing session (the chariot concept implying the speed of wheels in a race) of architectural teams charged with finishing a project by getting everyone into the brainstorming process.
>
> Today charettes are being used increasingly to open projects as well as to put on finishing touches. In education, the charette is being used to design and implement innovations involving a wide cross section of the community. Whatever the format, the charette has a common feature -- the creation of a "climate of creative combustion" in which all sorts of ideas are freely tested in an informal atmosphere.

> A typical charette is an intensive day and night effort of a week or more in length. The plan suggested here is for one or more daytime or evening sessions -- hence the term mini-charette.

Included in the mini-charette package was a list of suggestions describing how to organize a mini-charette and offering provocative questions to be used by the study committees. A report form requesting the number and titles of participants and suggesting a format for use in presenting the chief ideas resulting from the mini-charette was also included.

Because CLEN members were asked to invite not only individuals from the library community to their mini-charette sessions, but also those of other professions, the technique was used as an additional method of obtaining ideas on continuing education from representatives of a variety of professions.

Pretesting of the Survey Instruments

Because all survey instruments require pretesting in the kind of environment in which they will finally be used, each of the three survey instruments for this Project was pretested by persons actually engaged in continuing library and information science education.

Pretesters were contacted by telephone and those agreeing to participate were forwarded one or more survey instrument packages. Participants were asked to examine the packages in an extremely critical fashion and to indicate any ambiguities and redundancies they had found. They were also asked to make suggestions for questions that were omitted but that should have been included, and, in the case of the questionnaire, to offer a time-estimate for the length of time required to complete the questionnaire.

The questions, criticisms, and suggestions provided by the pretesters were examined and given careful consideration in the final "fine tuning" of the survey instruments.

Development of Supporting Statement for Clearance of Survey Instruments by the Office of Management and Budget (OMB)

All survey instruments distributed by federally funded projects to more than nine persons require OMB clearance. A supporting statement for the Project survey instruments -- questionnaire, interview request, and mini-charette instructions -- was developed and submitted to OMB. The statement described the justification for using the instruments, as well as the methodology for the development and use of the instruments.

IDENTIFICATION, REVIEW, AND ANALYSIS OF LITERATURE RELEVANT TO CONTINUING EDUCATION IN LIBRARY AND INFORMATION SCIENCE

The identification, review, and analysis process involved not only the study of what has been done in the area of continuing library and information science education, but what has been accomplished in other professions -- particularly those professions that seem to have moved further in provision for their continuing education needs at a national level than has been accomplished in librarianship. The Project Director had just completed a year-long project of locating, examining, and preparing for ERIC an annotated bibliography and comment (699 pages) entitled Continuing Library Education as Viewed in Relation to Other Continuing Professional Education Movements (Stone, E., 1974).

Prior to this a 98 page bibliography was designed to help those interested in building continuing library education programs at the post-Master's level as one element of the research project carried out in the Graduate Department of Library Science at The Catholic University of America on post-Master's education for middle- and upper-level personnel in libraries and information centers (Kortendick and Stone, E., 1971, pp. 405-503).

With these two major bibliographies as the foundation and starting point, the major emphasis in this Project's literature search, review, and analysis was devoted largely to:

1. Analyzing the literature relevant to continuing education in library and information science for the purpose of making recommendations relative to national planning for continuing library and information science education
2. Seeking recent literature on the continuing education of paraprofessionals, as the study cited above concentrated on professional education
3. Filling in some gaps not covered by the ERIC survey because of lack of time
4. Seeking out the instruments used for other studies which do not appear in the report literature, but which might have provided resources for the design of the questionnaire and the interview schedule
5. Updating the two previous bibliographies

The major bulk of the literature identification and analysis was done in July and August, 1973. However, it continued until the end of the Project to ensure that all relevant work was identified and analyzed. The most valuable sources for the literature identification were (1) the ERIC index, (2) the education journals of other professions -- such as Engineering Education, and (3) bibliographic references given to us by Advisory Board members and by persons interviewed for the Project.

IMPLEMENTATION OF THE SURVEY

The questionnaires were mailed October 12; the first completed questionnaires were returned to the Project team at the end of October. To ensure a response rate of at least 60 percent of the sample group, those who had not returned a questionnaire by the early part of November received a follow-up telephone call. Recording of questionnaire responses began as soon as the first completed questionnaires were returned.

It was decided to hand tabulate the questionnaire survey because the size of the sample did not justify computer tabulation. Responses to the open-ended questions (see Questionnaire item numbers II. B. and VII in Appendix A) were categorized and analyzed. A preliminary tabulation, based on the questionnaires received up until that date (66 percent of the number mailed out), was conducted the week of December 11 in preparation for the Advisory Board meeting held December 14 and 15.

After this first tabulation, 14 additional questionnaires were received, bringing the response rate up to 70 percent of the original sample. After the final closing date five more completed questionnaires were received, bringing the actual response rate up to 74 percent, but they were too late to be recorded.

During January and February, a final tabulation was conducted. Percentages and rankings were computed and the resulting statistics were then analyzed by the Project team. Conclusions and comparisons were drawn regarding the trends of the various survey groups.

During the tabulation process for the questionnaires, interviews were being conducted either by telephone or on a person-to-person basis. Those interviewed were from all areas of the country, to allow wide geographical representation. Notes were taken during all interviews and were later analyzed and categorized.

Although the sample group for the interviews had originally been set at 50+, additional people were asked to participate because of their involvement and expertise in continuing education or relevant fields. The final number of persons interviewed was over 100. The list of persons interviewed is presented in Appendix C and includes individuals representative of the following categories: authorities on continuing education in various disciplines and professions; college and university librarians; federal librarians; library association administrators and officers (national, state, and regional); library educators, library services program officers (HEW Regional offices); public librarians, school librarians, and special librarians.

Although only 12 mini-charette reports were received, the Project team felt that this research technique was of value. (Several persons indicated that they were interested in the exercise, but that because of scheduling problems would not be able to hold the mini-charette until spring -- too late for the Project report.) The reports that were received proved that the people who had participated in the exercise had given much thought to continuing education. These reports were analyzed and categorized.

An innovative approach to the mini-charette exercise was conducted for the State of Wisconsin by Muriel Fuller, Chairman of the Department of Communication Arts, University of Wisconsin Extension. Her group used the University Extension's Educational Telephone Network, which has listening locations around the state and two-way communication. They invited about 25 people from the Wisconsin Library Association -- Education Committee; division section, and Association officers; library educators and librarians; as well as professionals from other fields. Dr. Stone and Dr. Patrick also participated in this activity via telephone from The Catholic University of America.

The mini-charette meetings not only provided additional input that would not have been otherwise available, but they served to involve more people in thinking about how all the relevant groups -- library schools, associations, libraries, and individuals -- could best contribute to continuing education programs for the profession.

BUILDING OF THE MODEL

As a result of all the data that had been collected from the questionnaire survey, interviews, and mini-charette reports, and from the literature review and analysis, the Project team arrived at the specifications and requirements for a design for the continuing education of library and information science personnel.

The major system design specifications for such a nationwide plan for continuing library and information science education are:

1. Continuing education should focus on the improvement of client service through maintaining and increasing the lifelong competence of library and information science personnel

2. All library and information science personnel should have equal access to opportunity to continue their lifetimes of learning toward enhancing their total job competence. Local inadequacies in continuing library and information science education opportunities should be minimized or eliminated by new educational patterns and technology

3. All relevant groups -- individual library and information science personnel, library trustees, employing libraries, library schools, state library agencies, library and media divisions of state school agencies, library associations (local, state, regional, national), and all levels of government (local, state, federal) -- should have the opportunity to share in identifying needs, planning, programming, funding, implementation, and evaluation processes

4. Action should be taken to coordinate continuing education programming and to develop organized, sequential curriculum opportunities at the national level; however, products could be developed and should be made available on a local and regional basis

5. Any national coordination should reinforce, augment, and provide more effective utilization of existing institutional and inter-institutional programs, and existing programs should not be disturbed or displaced by national planning

6. In order to increase the probability of success, processes should be developed that will:

   a. continually assess and reassess the needs of the personnel in libraries and information centers
   b. provide as wide an array of opportunities as possible, while concentrating limited resources on high-priority needs common to a large number of library and information science personnel

   c. encourage awareness, interest, evaluation, and adoption by using both mass media and interpersonal communication channels
   d. monitor continuing education products and solicit feedback to assess quality, costs, and benefits

7. Any continuing library and information science education plan should meet community, professional, and personal criteria such as diversity, quality, continuity, convenience, accessibility, and personal satisfaction

8. A nationwide plan for continuing library and information science education should develop and encourage the acceptance of a recognition system for continuing library and information science education

9. Continuing library and information science education products should incorporate concepts such as a systems design approach, a behavioral approach to learning, conditions necessary for adult learning, learning needs as a basis for programming, multi-media and communications technology, principles of instructional technology

10. Guidelines should be developed to suggest possible roles for individuals and groups concerned with continuing education for library and information science personnel

With these design specifications as a basis, the model building process began. At the second meeting of the Advisory Board, December 14 and 15, 1973, preliminary results of the questionnaire survey and interviews were presented, followed by discussion of the design specifications. The Advisory Board was then introduced to several models that might have implications or provide inspiration for the model building session, which was to take place the following day. These models were:

1. The "Technology Information Exchange" Model

2. The "Continuing Education for Library Staffs in the Southwest (CELS)" Model

3. The "Professional Association" Model

4. The "Assessment Center" Model (based on ideas of Malcolm Knowles, Alan Knox, Leroy W. Nattress)

The following day, after a short briefing, the Advisory Board broke into groups for a model-building session. The models resulting from these small group discussions were then presented to and discussed with the other members of the Advisory Board.

At the close of the meeting, the Board advised the Project team to develop a preliminary draft of a model based on the survey and literature data and on the discussions at the Board meeting. This preliminary draft would then be sent to the 525 persons invited to participate in the Project survey to obtain their reactions and critiques. Their comments and recommendations would be used to modify and improve the preliminary model.

The preliminary draft was sent to participants before the American Library Association's Mid-Winter meeting, so that they could review the draft before meeting with members of the Project team to discuss the report.

About 30 people attended an open meeting to present their reactions to the draft. In addition, about 25 people who did not attend the meeting sent letters containing detailed comments on the draft of the model and their reactions to it. One of the Project team members developed three alternative models (see Appendix D).

The final version of the recommended model of a nationwide plan for continuing library and information science education is presented in Chapter 3. It is built upon the preliminary draft of the model but is substantially revised from that draft, in that it incorporates the comments of the reactors to the draft model and those of the Project Advisory Board members, as well as elements of the three models presented in Appendix D.

INTERACTION WITH THE ADVISORY BOARD

Upon notice of the contract award, the members of the Advisory Board (see Figure 1.1.) were selected in consultation with the NCLIS Project Monitor, Roderick Swartz. The Project Director contacted the Advisory Board members -- persons knowledgeable in the field of continuing library and information science education and representatives of the major groups concerned about continuing library and information science education -- and informed them of the start of the Project.

Because the purpose of the Advisory Board was to guide and counsel the Project team in every phase of the Project, the Board was kept constantly informed of the Project's progress. Suggestions and recommendations offered by the

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Duane Webster, Director
Office of University Library
Management Studies
Association of Research Libraries
Washington, D.C.

Figure 1.1. List of Advisory Board Members, Continuing Library and Information Science Education Project

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Board were carefully considered and incorporated into the Project.

The first Advisory Board meeting was held July 14, 1973. Board members present strongly endorsed the Project goal as one of major importance to the profession and saw it as feasible. Throughout the discussion, emphasis was made that to be successful, the Project should go beyond a plan on paper. Enough motivation and enthusiasm must be generated as the work moved forward so that the relevant groups would be willing to continue the time, human, and financial resources to implement the model after the conclusion of the Project.

The Advisory Board also made suggestions in the following areas: interview guide and questionnaire content; names of individuals and groups to be included in the questionnaire and interview survey; and citations of literature relevant to the Project.

At the second Advisory Board meeting December 14 and 15, the members of the Board received the data acquired to date and developed models for the nationwide continuing education of library and information science personnel.

The Advisory Board and Project team convened a third time during the ALA Mid-Winter meeting in Chicago. At this time the preliminary draft of the model and the reactions to it were discussed. The members of the Board contributed much in the way of support and suggestions concerning the model.

The Advisory Board members were sent a draft of the Final Report to obtain their reaction to it. Their suggestions and recommendations were considered in the refining of the Final Report.

LIAISON WITH THE LIBRARY COMMUNITY

The Project staff strongly believes that any plan for continuing library and information science education can be successful only if it involves both the people who have responsibility for continuing education programs and those served by the programs. Therefore, a major objective of the Project was to involve all levels of the library community as much as possible. This objective was achieved in the following ways. First, the major library journals were asked to publish a press release describing the Project and requesting readers to send us their comments and suggestions. Many responses were received. Second, members of the Project team made presentations concerning the Continuing Library and Information Science Education Project at the following meetings;

1. Seminar on "What Problems Face the Profession in the Next Five Years? The Role of Library Associations," sponsored by the Leadership Training Institute, U.S. Office of Education, Bureau of Library and Learning Resources, Washington, D.C.
2. Meeting of the Council of National Library Associations, New York New York, December 1973
3. Meeting of the Association of American Library Schools -- Committee on Continuing Education, Chicago, Illinois, January 1974
4. Association of American Library Schools -- Interest Group on Continuing Education, Chicago, Illinois, January 1974
5. Association of American Library Schools -- Continuing Education Mini-Workshop, Chicago, Illinois, January 1974
6. Public Library Association -- Strategy for Public Library Change Committee: Education of Public Librarians, Chicago, Illinois, January 1974
7. Council of State Librarians, Chicago, Illinois, January 1974
8. Council of National Library Associations -- Task Force on Continuing Education, Chicago, Illinois, January 1974
9. Library Administration Division -- Personnel Administration Section -- Staff Development Committee, Chicago, Illinois, January 1974
10. State Library Association Executive Directors and Secretaries, Chicago, Illlinois, January 1974
11. Upstate New York Chapter of the Special Library Association, Rochester, New York, February 1974
12. Seminar on "Training for Library Service in the 70's: the Role of Library Educators and Administrators," sponsored by the Leadership Training Institute, U.S. Office of Education, Bureau of Library and Learning Resources, Washington, D.C., April 1974

In summary, the Final Report to the Commission on Libraries and Information Science is a compilation of data and ideas from the library and information science community; from individuals of other professions involved in continuing education and from the literature relevant to continuing education in library and information science and other professions. The Continuing Library Education Network and Exchange recommended in this report is a synthesis based on the model presented in the preliminary draft plus the input from the open meeting held during the American Library Association's Mid-Winter meeting, the correspondence from the survey participants commenting on the preliminary draft, the comments from the Project Monitor and members of the National Commission on Libraries and Information Science, and particularly the suggestions of the Advisory Board.

The Project team, in making its recommendations to the National Commission on Libraries and Information Science in the form of this final report, has incorporated the data, opinions, suggestions, and criticism that it deemed necessary to fulfill the specifications of a plan providing equal opportunity for accessible high quality continuing library and information science education to the library and information science community throughout the United States.

CHAPTER 2

THE VIEW FROM THE FIELD*: WHAT ARE THE CONTINUING LIBRARY AND INFORMATION SCIENCE EDUCATION NEEDS?

DEFINITION AND SCOPE OF CONTINUING EDUCATION IN LIBRARY AND INFORMATION SCIENCE

The majority of the interviewees in the present study agree that continuing education for library and information science personnel is urgently needed. However, compared with other professions, continuing education in library and information science is still in the process of emerging and crystallizing as an area of special concern. It is just in the beginning stages of being recognized as necessary for proficient practice. For example, only 17 percent of the complete sample give continuing education a "high" priority ranking now, although 57 percent feel it should have a "high" priority (see Appendix B, Table 6). The two groups ranking highest in believing that continuing education should have "high" priority were regional library associations (100 percent) and the school libraries (88 percent). The view of 8 out of 11 groups represented in the questionnaire is that continuing education should have a "high" priority. The three indicating that it should have only "medium" priority were national libraries, accredited library schools, and academic libraries.

Continuing education in library and information science has not reached the stage advocated by Houle (1970 a), Nattress (1970 b), and C.W. Stone (1973), or as examplified by the legal profession, where formal pre-service education is joined by continuing education to form a continuum, the former leading naturally into the latter. Also, it is in the legal profession that continuing education is not thought of as something that may or may not be added on. Nor has the field of library and information science conceptually accepted a still more advanced state of development, as exemplified by the health professions, in which:

1. The stated goal (Dryer, 1961, Nattress, 1970) is the availability of continuing education to every professional who desires it, made possible by the full use of new technology

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* "A view from the field" includes perceptions gained from the data gathered through the survey instruments and from a review of the continuing education literature in library and information science and other professions.

2. Identification and management of the conditions of learning are considered in relation to continuing education programs

3. Behavioral objectives are identified for programs; criteria are established; and evaluation procedures are systematically integrated into the whole programming of the planning process

DEFINITION

The literature survey indicated clearly that there is no universally acceptable definition of continuing education among the professions. Even within professions, the term is defined hazily at best, and this is also the case for the library and information science field. When the Committee on Continuing Library Education of the Association of American Library Schools set about writing a position paper on continuing education to submit to the Continuing Library Education Network (CLEN)*, because no acceptable definition could be agreed upon among the committee members, a precise definition was not included in the position statement. (AALS, 1973).

Professional literature generally, however, does show an increasing tendency to define continuing education rigorously in terms of precisely stated objectives. It is becoming increasingly common to find in professional literature a distinction between "advanced education" (advanced degree seeking) and "continuing education," although the two are frequently intertwined (Continuing Education for R & D Careers, 1969, pp. 1-5). This lack of any universally acceptable definition of continuing education, even within a given profession or occupation, has proved a stumbling block slowing down action in many professions.

Taking all of these factors into consideration, the Project team decided to try to arrive at an operational definition of continuing education in library and information science based on the judgments of those participating in the questionnaire survey. The results are displayed in Appendix B, Table 5. The concepts identified in the questionnaire survey were generally reflected in the interviews as well.

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* Members invited to join CLEN include: library schools accredited by ALA, library programs in colleges and universities not accredited by ALA, state library agencies, national, regional, and state library associations, individuals representing employing libraries or agencies concerned about continuing education, and directors of the regional offices of the Library and Learning Resources of the U. S. Office of Education.

For descriptive purposes, the data shows that in the perception of the respondents, continuing education in library and information science should include the following descriptive categories, which are presented in ranked order, with the highest ranking listed first. Respondents felt continuing education has the following qualities:

1. It implies a notion of lifelong learning as a means of keeping an individual up-to-date with new knowledge; it prevents obsolescence

2. It includes updating a person's education (e.g., makes an individual's education comparable to that of a person receiving a like degree or like certificate at the present time)

3. It allows for diversification to a new area within a field (e.g., supervisory and management training)

4. It assumes that the individual carries the basic responsibility for his or her own development

5. It involves education activities which are beyond those considered necessary for entrance into the field

Beyond these top five priorities indicated by the respondents, three other concepts come out in the data that are relevant to this discussion -- one makes continuing library and information science education different in its basic concepts from most other occupational or professional literature reviewed; the two others agree with positions generally accepted by other occupations and professions.

The concept distinctive to library and information science is that 88 percent of the respondents to the questionnaire feel continuing education should be provided for all levels of personnel: professional and supportive. Furthermore, a majority of the interviewees expressed the same view; therefore, it was included in the design specifications. The inclusion of this added factor makes the task of developing a nationwide plan for continuing library education much more difficult, and much more comprehensive

The Project team noted that, in the professional literature, another important characteristic of continuing education studies was that they usually refer to training which better equips people for their jobs, for the jobs they have now or aspire to in the near future. In the questionnaire results, this concept did not appear among the top priorities, but ranked tenth.

One explanation -- as pointed out by the Advisory Board members of the Project -- is that the respondents disagree with the exclusive nature of the word "only" as it was stated in the questionnaire. (The questionnaire stated: "CE applies only to education which will enhance the individual's competence for the job now held or aspired to in the near future.") Respondents may feel that the definition of continuing education should be interpreted in a larger sense than this phrase allows without excluding this as a reason.

Although the "refresher" objective, that is, the review of once-familiar material to enhance skill and competence in present-day application, is ranked seventh, it should be noted that 86 percent of the respondents believe it should be included in the definition.

Summarizing, this report incorporates the following elements in the definition of continuing education: lifelong learning; updating; diversification to a new area within a field; individual responsibility for his or her own development; activities beyond those normally considered necessary for entrance into the field; inclusion of all personnel -- professional and supportive and trustees; and the refresher objective. Another characteristic that is typical of continuing education generally is education that better equips people for their contemporary work. Dubin expresses it this way -- continuing education is education needed by the practitioner "as perceived by him or his employer to enhance his total job competence." (Dubin and Marlow, 1965, p. 17).

The concept of continuing education as it is presented in professional literature is closely intertwined with discussions of "technological obsolescence." Although frequently undefined, technological obsolescence in an individual is generally taken to mean a "deficiency of knowledge such that he approaches problems with viewpoints, theories, and techniques less effective than others currently used in his field of specialization " (Continuing Education for R and D Careers, 1969, p. 5). The literature identifies two types of technological obsolescence: one type involves "overcoming" individual obsolescence; the other has to do with the obsolescence of knowledge and techniques themselves. The latter emphasizes the changes taking place in knowledge itself as a source of problems experienced by individuals, rather than stressing inaction on the part of individual practitioners.

Designing pre-service curricula, structuring the employment situation, and planning for continuing education, all in a manner such that library and information science personnel are educated, prepared for, and permitted to engage in a lifetime of continuing study as part of their normal careers, should be a goal of the library and information science profession. Undergraduate and pre-service education should be joined to continuing education to form a continuum where one leads naturally into the other and where the latter is not thought of as an appendage. When that goal is reached, "overcoming" obsolescence will give way to "preventing" obsolescence, which is the same as saying "keeping up-to-date" with new knowledge and maintaining useful skills and knowledges.

This is reflected in the statement by Kreitlow (1965, p. 4) in which he prophesies that the time will come when continuing education and retraining are the positive alternative to unemployment. He envisions the time when adults responding to questions about their employment, will have only three alternative answers: (1) "I have a job;" (2) "I'm in retraining;" (3) "I'm retired."

Within such a framework Kreitlow says there can be no unemployment. "It is then that the narrow walls of thinking about education must crumble," he states, and the myth about higher education being a terminal educational goal will no longer exist.

SCOPE OF CONTINUING EDUCATION

In the previous section on the definition of continuing education, the point was made that 88 percent of the questionnaire respondents believe that continuing education should be provided for all personnel, professional and supportive. This section summarizes data relative to the break-down of "all personnel" into seven target groups, as defined on page two of the questionnaire (see Appendix A). These are: (1) librarian with MLS, (2) operating librarian without MLS, (3) technical information specialist, (4) paraprofessional, (5) library technician, (6) clerk, or (7) trustee.

Within the category "all personnel," respondents were asked to rank all the target groups in order of priority for continuing education they should receive on a nationwide basis over the next three to five years. Overall, the ranking indicates that the respondents believed that first priority should be provided to librarians with MLS or more; second, to operating librarians without MLS; third, to paraprofessionals; fourth, to the technical information specialists without MLS degrees. The trustees were ranked sixth by the complete sample group; and clericals ranked seventh. But with the employing libraries, trustees ranked eighth and clericals fifth; and with the unaccredited library schools, trustees were eighth and clericals seventh (see Table 13, Appendix B).

These priorities would give a national network with limited financial and human resources an indication that first attention should be paid to the needs of MLS librarians, operating librarians, and paraprofessionals. But in long-range planning, the larger directive of providing continuing education for all library personnel -- professional, supportive, and trustees -- provides the field of library and information science with an opportunity to play a leadership role in developing information science service teams. These teams would correspond roughly with the concept developed by the health field of "Health Care Teams" and "Health Sciences Teams." In education, they would correspond to the concept of differentiated staffing.

A definition of a Health Sciences Team is provided by Williams (1968, p. 57):

> A Health Sciences Team is a group of health professionals with their respective associated technologists, technicians and other essential personnel, whose overall goals are the promotion of health, the prevention of disease, the diagnosis and treatment of illness and the alleviation of suffering, who by cooperation, coordination and integration of effort provide health and patient care embracing the sum total of relevant knowledge, skill and the technology produced by all the sciences and as applicable by other learned professions, and who recognize every healthy or apparently well person, the patient, the family and the community as integral participants in the process of providing this care.

The following glossary was developed by the University of British Columbia and further illustrates the concept by describing the meaning of the term "health sciences team." The definitions were formulated so that a firm foundation for the development of the principles and guidelines for programming health sciences teams would emerge to assist others who are taking this approach to achieve their goals of superior competence and high quality service through a continuing education.

"1. team - set [group] of persons working together, combined effort, organized cooperations. (Oxford Concise Dictionary)

2. professional - (variously defined but for these purposes) - a university graduate in an academic field with relevance to the provision of health care in the community, including dentistry, hospital administration, library science, medicine, nursing,nursing-dietetics, occupational therapy, pharmacy, physiotherapy, psychology, social work, and others.

3. essential personnel - a wide range of the most important individuals including executive personnel, administrative assistants, secretarial, clerical, maintenance staff, and others.

4. overall goals - listed in a suggested rank order with "promotion of health" being first and paramount.

5. health - a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. (World Health Organization).

6. cooperation - to work together to the same end [goal]. (OCD)

7. coordination - to bring [parts] into proper relation. (OCD)

8. integration - to combine [parts] into a whole. (OCD)

9. all the sciences - physical, chemical, biological, basic medical, clinical, behavioral, computational, engineering, and others.

10. other learned professions - architecture, education, law, religion, and others.

11. apparently well person - appearing healthy but presymptomatic disease revealed by skillful examination including multiphasic testing. (Williams, 1968, pp. 57-58)

The foregoing example from the health science disciplines makes apparent the comprehensive nature of a library and information science team, its membership, goals, supporting resources, and functional principles, as envisaged by the model suggested for nationwide planning in this report. In reading the proposed Processes for the model described in the next chapter, it should be kept constantly in mind that, although each activity does not specify that there will be provision for different levels of performance in the library and information center -- as a part of the team concept -- this is an overall specification for the Processes.

In short, the principle of matching content with levels of need is a universal characteristic of the proposed model. Thus, continuing education offerings are graduated in difficulty within each subject. This graduate enables an individual or group to enter into the learning experience at the level suitable to individual needs. The means of providing such flexibility is a new kind of learning module organized by skill level in which each level must have certain basic components, but at different levels of student competence (Schein, 1972, pp. 130-136).

FORCES TO BE CONSIDERED IN DESIGNING A NATIONWIDE SYSTEM OF CONTINUING LIBRARY AND INFORMATION SCIENCE EDUCATION

In this section, forces to be considered in designing nationwide system of continuing library and information science education are discussed. These forces are:

1. Forces for and against nationwide planning for continuing library and information science education
2. Use of a systems approach
3. Basic assumption concerning professional education for persons in the library and information science field
4. Use of interdisciplinary approaches
5. Criteria that motivate individuals to participate in continuing education

FACTOR 1: FORCES FOR AND AGAINST NATIONWIDE PLANNING FOR CONTINUING LIBRARY AND INFORMATION SCIENCE EDUCATION

In the planning, development, and implementation of any nationwide plan for continuing library and information science education, it is necessary to consider both the forces that facilitate the acceptance of a new concept and encourage a change and those forces that prevent change. To enable change to occur it is necessary to consider the nature of these forces in order to develop strategies for dealing with them. We have divided the forces for and against any nationwide plan for continuing library and information science education into two categories: (1) internal forces -- those within the library world that we can do something about; and (2) external forces -- societal factors, which we may not be able to change, but which must be considered in working with change within librarianship (see Figures 2.1 and 2.2).

The source for the data was reponses that interviewees gave to the questions: "What forces do you see as the major forces for a nationwide blueprint for continuing library and information science education? What do you see as the major forces against such an approach?"

MENTIONED MORE THAN ONCE (Listed in Ranked Order)	MENTIONED ONCE (Listed in Alphabetical Order)
INTERNAL FORCES FOR* (Within the Library World; we have to do something about these)	
Demand/need (felt known) (both for continuing education and for a national approach): 16 times Impact of the world and rapidly changing society (technology; obsolescence): 6 times Benefits of economy (all resources) on national program: 3 times Deeply convinced leaders in field: 3 times Survival issue: 3 times Documented needs: 2 times	"A natural" in a field which deals with information Affirmative action programs Association of American Library Schools has strong impetus and interest Changing roles (personal/institutional) Changing university patterns Concern by U.S. Office of Education, Association of American Library Schools Current library school graduates know about continuing education Danger of obsolescence Economic pressures Frustration with the present Greater understanding of continuing education as an issue Increasing need for accountability Job security Librarian trying to be all things to all people Media and our allies there National Commission on Libraries and Information Science Need for nationally accepted standards No training literature in library science "Overwhelmed" librarians Participative management Present chaotic situation Present duplication of effort Specialized staff Shortage of jobs Stronger public service This study will be catalyst Understaffed libraries Willingness and receptivity of some in field Willingness of library schools to do
EXTERNAL FORCES FOR* (Societal Factors; it may not be possible to change these -- but they need to be considered in working on change within librarianship)	
Changing society: 3 times Communities beginning to see what librarians are and can be: 2 times Demand for quality education opportunities: 2 times Efforts of other national associations and professions: 2 times	Changing user needs Competition in delivery of information service Ever increasing pace of change General trend toward continuing education Good education is becoming an accepted value Improved educational technology Increasing need for accountability Incredible competition from information industry Mobile society Societal trend -- Need to know, demand for library services

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* Responses to the interview question: What forces are working for a nationwide plan? These data are recorded in the words of the interviewees.

Figure 2.1 Forces for a Nationwide Plan

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MENTIONED MORE THAN ONCE
(Listed in Ranked Order)

MENTIONED ONCE
(Listed in Alphabetical Order)

INTERNAL FORCES AGAINST*
(Within the Library World; we have to do something about these)

- Comfortable librarians giving lip service: 5 times
- Fragmented field with narrow view: 5 times
- Low priority for continuing education: 5 times
- Loss of individuality, autonomy, and territoriality: 5 times
- Most don't see value of continuing education and lack experience with it: 5 times
- No rewards: 5 times
- Resistance to be "organized" or dictated to: 5 times
- Few resources (money, leadership) and skilled people: 4 times
- Committee on Accreditation's "punishment" of library school continuing education programs: 3 times
- Vested interests: 3 times
- Complexity of getting it off the ground: 2 times
- Identification of need: 2 times
- Restrictive leadership: 2 times
- Tradition: 2 times

- Anxiety about technology
- Continuing education not integrated with job
- Competitive spirit
- Current status of planning and funding
- Diverse perception
- Duplication of effort
- Expensive
- Funding
- Government promoted "scattershot" approach
- Inertia
- Institutionalized and rigid structures
- Lack of good programs
- Lack of interest
- Lack of professional concept
- Lack of real commitment
- Little encouragement
- Loss of money
- Low visibility for continuing education
- No evaluation of present efforts/opportunities
- No one to determine what is needed
- Overload of brass
- Poor models (association conferences)
- Proprietary information
- Scramble for credit
- Time
- Timid librarians who don't invest or demand
- Unclear goals

EXTERNAL FORCES AGAINST*
(Societal Factors: it may not be possible to change these -- but they need to be considered in working on change within librarianship)

- Funding (lack and how done) (also an internal): 12 times
- Geography: 2 times
- Political scene, government situation: 2 times

- Current political and social scene
- Job market -- number of jobs available
- Overemphasis on degree and formal programs
- Parochial attitude of money allocators
- Public unaware of usefulness of librarians to them

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* Responses to the interview question: What forces are working against a nationwide plan? These data are recorded in the words of the interviewees.

Figure 2.2 Forces Against a Nationwide Plan

The initial identification of forces for and against a proposed plan or action is usually the first step in planning a strategy, and the data collected should be subject to more refinement through additional development and "distillation" before it is really useful data. Like the first process in a needs assessment, the first definition of a strategy is apt to be superficial, but it is a necessary first step to producing a clearer idea of the concept. In the implementation process, the challenge is to strengthen and make highly visible the facilitating forces, or bridges and to weaken the impeding forces. Often the barriers are based on misconceptions or misinformation that need to be corrected, and the facilitating forces may need to be strengthened in their presentation by supportive documentation and then widely publicized.

In the present case, the barriers and the facilitators, or bridges, are touched upon throughout the report and therefore are not singled out for discussion here. It should be noted, however, that two barriers are mentioned the most often.

Of the 49 forces that interviewees perceived would serve as barriers to a nationwide plan, 14 were mentioned more than once.

"The fear of loss of individuality, autonomy, and territoriality" was listed by five interviewees, while five others listed "resistance to being 'organized' or dictated to." This probably reflects, at least in part, a widespread dislike of control of private and local affairs by a remote bureaucracy, even when such encroachment is described by its supporters as being in the public and professional good.

Two other forces listed in Figure 2.2 were mentioned five times each. They might be considered as one force. As listed, they are: (1) "low priority for continuing education," and (2) "most don't see value of continuing education and lack experience with it." Recent events, however, indicate that continuing education is rapidly gaining in importance throughout the profession.

Current Status of Continuing Education

There is considerable evidence that component groups at the state, regional, and national levels are taking their responsibilities relative to continuing library and information science education seriously. Some samples of this type of continuing education activity are discussed briefly in the following paragraphs.

National Level

The American Library Association's policy statement, Manpower: A Statement of Policy Adopted by the Council of the American Library Association, June 1970, includes a strong statement on continuing education. The American Library Association (1970, p. 8) states:

> Continuing education is essential for all library personnel, professional and supportive, whether they remain within a position category or are preparing to move into a higher one. Continuing education opportunities include both formal and informal learning situations, and need not be limited to library subjects or the offerings of library schools.

The American Library Association's Staff Development Committee of the Personnel Section of the Library Administration Division drew widespread attention throughout the profession to continuing library education by the July 1971 issue of Library Trends entitled, "Personnel Development and Continuing Education in Libraries" (Stone, E.W., 1971b). This issue puts forth a rationale for continuing library education, suggests concepts, and policies, and makes recommendations for action to match suggested criteria.

The Public Library Association's goals study, A Strategy for Public Library Change, conducted by Allie Beth Martin (1972, p. 50) cites continuing education as one of the highest priorities for action:

> There is an urgent need for concentration on training and retraining of the practitioners -- those presently performing and those who will follow -- to enable them to know how to establish goals for individual libraries, how to develop libraries which will continually change with society and perform efficiently in the community.

As a result of this study, a task force on continuing education is at work currently within the Public Library Association (PLA). Its emphasis on continuing education for personnel of public libraries stems from the goals study's identification of the barriers to future public library development. Martin's goals study (1972, p. 32) found that:

> There was a general expression from the respondents that library education is failing to respond to the educational needs of public libraries either in the formal academic program leading to a degree or in meeting continuing education needs.

The Association of American Library Schools (AALS) has recognized the need for giving more attention to continuing education by establishing a permanent Committee on Continuing Library Education. This Committee's first action was writing a position paper on continuing library education (AALS, 1972 a). The Committee soon followed this with a two page position paper which it has circulated to other national library associations for adoption (AALS, Committee on Continuing Library Education, 1973b) (See Appendix E). The Medical Library Association and the Special Libraries Association have officially endorsed this statement.

This AALS committee developed the Continuing Library Education Network (CLEN) to serve as a communication channel for library schools, national, regional, and state library associations, state library agencies, and self-selected individuals concerned with the need for developing continuing education throughout the profession. In addition to sending and receiving communications relative to continuing education, the AALS Continuing Library Education Committee has provided a mini-workshop for members of CLEN each year since the establishment of the network. The first, in January 1973, was on inter-professional continuing education (AALS, Committee on Continuing Library Education, 1973 a); the second, in January 1974, on teaching methods appropriate for continuing education activities. Both drew a large number of participants beyond the CLEN membership who had heard about the meetings and wanted to attend.

In order to build its activities on a sound data base, the AALS Continuing Education Committee conducted two surveys. One was of the continuing library education activities and programs as carried out by library schools (Stone, 1972 a); the second was of continuing library education activities and programs as carried out by national library associations (Stone, 1972 b).

The Medical Library Association began its continuing education efforts in 1957 with the holding of national seminars and has experimented with a number of formats since that time. The first Committee on Continuing Education was appointed in 1962 (Brodman, 1963). Recently, the activity of the Association has been greatly intensified with the appointment of a full-time Director of Medical Library Education. A full-scale national program has been launched which includes needs assessment, certification of various grades of medical librarians, sponsoring approved training courses in connection with national and regional meetings, seeking funding for the preparation of individualized instructional packages, and the regular publication in the Medical Library Association News of "Continuing Education Opportunities Available."

Since 1953, the American Association of Law Libraries, in cooperation with a law school near the particular convention city, has held pre-convention institutes on various aspects of librarianship. Since 1964, the Association has rotated courses, each on four basic areas of law librarianship. Each of the institutes is divided into two sections, basic (for less experienced law librarians) and advanced (for the more experienced) (Wildman, 1972).

The Special Libraries Association (SLA), during its 1968 annual meeting, held a general planning session on continuing education sponsored by the Education Committee (Sloane, 1968). Each year since that time the Education Committee has sponsored a full day of continuing education seminars on the first day of its annual conference. In his inaugural address at the 1972 Annual Meeting in Boston, the President of SLA, Edward C. Strable, stated that he considered continuing education to be the most outstanding and encouraging trend in librarianship today.

The federal government has also shown an interest in continuing education. For example, the Federal Library Committee and the U.S. Office of Education undertook in 1968 to identify the special educational needs of federal librarians and to provide programming to meet these needs. A research team at The Catholic University of America conducted a survey of librarians from all over the country (Kortendick and Stone, E.W., 1971). As a result, the specific continuing education needs of federal librarians were identified and three courses developed (Kortendick and Stone, E.W., 1972), which have, since the completion of the project, been offered in the library community, and the materials produced in connection with the courses have been supplied to others on request. The Civil Service Commission, through its training division, has planned and implemented numerous courses in the Washington, D.C. area. The National Library of Medicine is an example of one agency which trains its library personnel in the skills necessary to participate in its own system. From 1964 to 1970 the National Library of Medicine instructed its employees in the use of MEDLAR and since that time has been giving instruction in the use of MEDLINE both to employees and users of the system.

The U.S. Office of Education has recognized the nationwide need for continuing education opportunities for library personnel. In a major effort to help meet this need, federal funds have been made available to partially sponsor special institutes or training programs. Figure 2.2. shows the major training trends seen in Title II-B programs as analyzed by the Leadership Training Institute staff of Florida State University, itself a program funded by the Division of Libraries and Learning Resources, U.S. Office of Education.

A particularly helpful recent publication emanating from the Leadership Training Institute of Florida State University, sponsored by the U.S. Office of Education, is Sheldon's (1973) publication "Planning and Evaluating Library Training Programs. A Guide for Library Leaders, Staffs and Advisory Groups." This work details the process of planning and evaluation of continuing education and staff development programs using the principles developed by Stufflebeam (1972 a and b) and others at the Ohio State University Evaluation Center and popularly known as the CIPP model (discussed in the next section). The overall impact of the HEW Title II-B Institutes in Librarianship is summarized in the publication by McCarthy (1973).

Another indication of the rising recognition of continuing education as a high priority in the field of library and information science was the fact that, in the regional hearings, the National Commission on Libraries and Information Science held throughout the country in 1972 and 1973, the need for continuing education was repeatedly expressed. As a result, the Commission initiated the present study for the provision of recommendations for a nationwide program of continuing library and information science education.

Regional Level

A prime example of concern for continuing education at the regional level is the amazingly swift and effective organization of the Continuing Education for Library Staffs in the Southwest project (CELS) (Martin and Duggan, 1973 a and b). The realization of CELS stemmed from the strongly expressed needs of the libraries in the six-state Southwestern Library Association (SWLA). The ALA Goals Award Survey of the Southwestern Library Association conducted by Grace T. Stevenson (1971, pp. 101-102) states:

> One of the programs most frequently listed as needed was continuing education, at all levels, in all forms, and covering all subject matter. There were many requests for educational opportunities at the regional level and within the states.

In September, 1970, library leaders from the Southwest identified continuing education as the highest priority in the list of eleven regionwide needs. As a result of that meeting, a proposal was written requesting $25,000 from the Council of Library Resources, and funds were granted to establish a Southwestern Library Interstate Cooperative Endeavor (SLICE). CELS is a major project of SLICE. Subsequently, the six state library agencies in the Southwest Library Association each contributed $2,000 to SLICE. The Southwest Library Association is but one of many organizations that has shown action-oriented concern for continuing education.

In several other regional library associations continuing education has a major thrust. Under the umbrella of WICHE (Western Interstate Commission for Higher Education), the Western Council on Continuing Education for Library Personnel serves five states: Alaska, Arizona, Montana, Nevada, and Washington. Peter Hiatt, former director, summarizes the rationale for this multi-state operation:

> By sharing multi-state resources, problems and experiments, WICHE is in a position to mount experimental programming and to evaluate techniques, materials, and results ... The overview offered by a multi-state operation makes it possible to develop programs which not only meet a real need, but which also contribute to an educational matrix which can result in a planned, continuous program of continuing education, rather than in the usual scattership approach of unrelated, uncoordinated institutes, workshops, courses, and packages. (Hiatt, 1973, p. 336)

Both the New England Library Association, with it its Continuing Education Committee which has produced workshops and continuing education programs at the last four annual meetings, and with its "Outreach Network" approach developed under the leadership of Barbara Conroy, and the Pacific Northwest Association, with its annual conference worshops initiated under the presidency of Mary Ann Reynolds, recognize continuing education as a central responsibility.

Six mid-western states -- Missouri, Wisconsin, Minnesota, Indiana, Michigan, and Illinois -- have formed a Committee on Continuing Education and regularly meet to exchange plans and achievements, and to identify special resources and research being conducted which would be helpful in planning for continuing education programs (Midwest States Committee on Continuing Education, 1972).

State Level

State library agencies also recognize the need for giving more attention to continuing education, as reflected in a report entitled Education of State Library Personnel (Hiatt and others, 1971). The report has implications for continuing education that go far beyond the group for which it was specifically designed, namely State Library Agency Professional Personnel. In fact, most of the report can be applied equally well to all levels of library personnel and in all types of libraries. The report grew out of a charge by the (then) American Association of State Libraries and the Library Education Division to their Interdivisional Committee on Education of State Library Personnel. Its stated objectives were:

1. To assess the needs of professional personnel performing functions unique to state library agencies, with emphasis on the consultant and administrative-supervisory personnel

2. To recommend means and methods of designing educational programs to meet these education needs

3. To recommend a structure for carrying out this programming Hiatt. and others, 1971)

The emphasis throughout the report is on continuing education, whether formal or informal. In order to accomplish the goals described, the Committee emphasized the need for cooperation with other agencies and institutions, especially with graduate schools in the fields of librarianship, communications, and related disciplines; professional associations; and regional and national agencies in higher education. The report is valuable from a number of viewpoints. One of these is that specific means of implementation for the stated objectives are detailed through the suggestion of two immediate steps of implementation and one long-range plan for later consideration. The report also recommends a National Advisory and Action Committee for Continuing Education of State Library Personnel, with a suggested composition of 11 members who meet twice yearly.

An example of positive action by a state in long-range planning is provided by the establishment of the Advisory Council of Library Education in New Jersey.

> The council is conceived as being vested with responsibility for immediate and long-range planning and for developing and articulating library education programs to meet the needs of library, media, and information programs in New Jersey. The Council would also advise on matters of continuing education in librarianship. It is envisioned as providing the support which is needed to undertake urgent programs such as the development of televised or individual instruction materials for personnel in library services throughout the State. The council should also encourage innovative programs in library education, equivalency tests, etc. (McDonaugh, 1972, p. 12).

At present the council members consist of: State Librarian, Dean of the Graduate Library School; representatives from the Special Libraries Association, New Jersey School Media Association, the New Jersey Trustees Association, New Jersey Library Association; New Jersey Audiovisual Council; a University Trustee (interested citizen); and representatives of the following agencies giving library programs: private college, two year community college, four year state college undergraduate program; four year state college program (graduate and undergraduate). The Chairman, who is elected, presides at meetings and appoints ad hoc committees to work on special projects. For example, one group is currently investigating the use of television for at least one course or part of it. Another is looking into the need for a civil service certification for technicians. Other groups are at work on continuing education related matters (Deininger, 1974).

Increasingly state library agencies, often in cooperation with state library associations and universities, are offering workshops to sharpen the skills of library personnel. For example in Ohio, during 1971-1972, 477 staff members from Ohio libraries participated in staff development programs sponsored by the State Library. Programs emphasized improved management, PPBS, the development of leadership and motivation, and the evaluation of employee performance. (Workshops Sharpen Skills, 1972). During 1972-1973, 400 staff members from Ohio public, academic and special libraries participated in State Library sponsored workshops. The workshops provided opportunities to keep abreast of changes in services, materials, and technology. (Workshops Emphasize Services, 1973).

The examples presented in this section illustrate some of the ways in which representative groups within the library and information science field have come to grips with the problems and opportunities for continuing education. Many other examples at national, regional, state, and local levels could be cited showing widespread recognition that continuing education of library and information science personnel is one of the most important problems facing the field today.

In a prize-winning article on continuing education published in the Ohio Library Association Bulletin, Shera highlights some significant, recent continuing education activities in librarianship and states that the role of continuing education in the field is being increasingly recognized.

> Librarians, ... , like other professionals, are becoming increasingly aware of the need for a variety of learning experiences that extends or builds upon previous experience in the same general area of knowledge and the specific goals of which are not intended to terminate all study in that area. (Shera, 1972)

Shera (1972) concludes his remarks, however, with the following critique:

> Good as these activities have been, and many have been conspicuously successful, they suffer from lack of coordination and a unified formalized structure that would establish them as an important part of the practicing librarian's professional life.

Similarly Zachert (1972) writes:

> The recitation of the commitment -- and the achievements -- of various components of the library is not intended to imply that there is coordination in either planning or implementation of accepted concepts of continuing education. Rather, as a series of commentators has pointed out, present efforts are highly fragmented. Even more significant, educationally speaking, is the fact that the totality "lacks direction, sequence and culmination."

In summary, the accomplishments to date indicate that the capability needed to organize continuing education effectively on a nationwide basis exists, but it has not been used. The lack of any central attempt to lead using a total systems approach is partly responsible for this situation. The design of a total system is essential for nationwide planning. This essential component and others important for nationwide planning are briefly summarized in the remainder of this section.

FACTOR 2: USE OF A SYSTEMS APPROACH

As a point of reference here, we present a concise defintion of a system:

> A system can be defined simply as any collection of persons with resources, a plan, and a goal. The various elements within it are ordered and arranged to accomplish a stated mission in a particular way. ... A system may be pictured as a device for converting inputs (such as manpower, machine power, space and money) into desired outputs. All this is done according to a plan and any constraints that apply must be spelled out. Components within a system are interactive and interdependent.
>
> Stated another way, every system has boundaries. There is an environment that surrounds it -- a kind of skin that separates the unique entity called a system from factors outside it. If there is interplay between factors within and those outside the system, it is

> called an open system. If there is no interchange...it is called a closed system. Closed systems are unstable in the long run for they lack the mechanism to sense changes in the surrounding environment which have implications for the effectiveness of internal operations. (Knezevich, 1970, p. 75)

Using the systems approach, Conroy (1974, p. 4) has enumerated some of the guidelines of basic principles on which sound continuing education programs should be built. "Program" as it is used in this context, is defined as "coordinated and sequential efforts directed toward a given goal . . . continuing education of library personnel."

Steps that are involved in the use of the systems approach can be briefly summarized by quoting from the Conroy guidelines:

> I. Planning the Program
>
> Planning is a process in which the present situation is carefully examined and preparation is made for changing that situation. The success of any program depends to a great extent on the soundness of the planning. Risk of failure is tremendously reduced if parts of the planning process include individuals who are affected by the program -- those who may participate in it, those who will be responsible for implementing it, and, in some cases, those who will be users of the products or services which are likely to be affected as a result of the program.
>
> Guideline 1: Information about needs must be gathered
> Guideline 2: Information needs must be analyzed
> Guideline 3: Program objectives must be formulated
> Guideline 4: Resources must be assessed
> Guideline 5: A program of activities must be designed
>
> II. Implementing the Program
>
> All activities in a program of continuing education must relate to the objectives that were determined for the program. Decisions concerning the who, what, and how of the implementation should largely be determined on the basis of what is best in terms of fulfilling the objectives. Implementation of a program does not mean that all planning is concluded. Although the bulk

of program planning may be done before implementation begins, each of these phases overlaps the other. Implementing a planned activity may indicate a need for redefinition of an original objective or for adjustment of some of the original planning.

Guideline 6: The Administrative responsibilities must be assigned
Guideline 7: The training staff must be selected and organized
Guideline 8: Learners must be ... prepared for their involvement
Guideline 9: The educational activities must promote learning
Guideline 10: Appropriate materials and facilities must be provided

III. Evaluating the Program

Evaluation is often seen only as an instrument for assuring accountability. Evaluation is also a process which becomes a tool to provide more adequate information which an individual, an organization or a community can use to make better decisions. Evaluative methods can provide information about the extent to which a program's impact is what was intended and to discover the means by which that impact was achieved.

Guideline 11: The purposes for evaluation must be determined
Guideline 12: The evaluation process must be plannned
Guideline 13: Evaluative information must be collected
Guideline 14: Evaluative information must be organized and analyzed
Guideline 15: Evaluative data must be reported and utilized
(Conroy, 1974)

Guba and Stufflebeam (1970) of Ohio State University recommend the consistent use of four kinds of evaluation: Context, Input, Process, and Product (forming the acronym CIPP). The Division of Libraries and Learning Resources of the U.S. Office of Education has sponsored a number of workshops that have provided training for leaders of continuing library and information science education programs in the practical use of this CIPP model and has provided practical guidelines in the Sheldon (1974) publication entitled, Planning and Evaluating Library Training Programs: a Guide for Library Leaders, Staffs, and Advisory Groups. Those who participated in these workshops will be a valuable resource at the local, state, and national levels in making evaluation processes relative to continuing education more effective.

In summary, Guba and Stufflebeam (1970, p. 15) define evaluation as "the process of obtaining and providing useful information for making education decision." The four types of evaluation are:

1. Context evaluation services planning decisions, by providing information about needs, problems and opportunities, which in turn determine objectives

2. Input evaluation services structuring decisions, by providing information about the strengths and weaknesses of alternative strategies for achieving objectives, which in turn determine procedural designs for achieving objectives

3. Process evaluation services implementing decisions, by providing information about the strengths and weaknesses of a strategy during implementation, so that either the strategy or its implementation might be strengthened, which in turn determines the execution of chosen designs

4. Product evaluation services recycling decisions, by providing information for determining whether objectives are being achieved and whether the procedure employed to achieve them should be continued, modified or terminated, which, in turn, determines whether to continue, terminate, or modify a project

Simply stated, the CIPP model is designed to answer four questions:

- What objectives should be accomplished?
- What procedures are being followed?
- Are the procedures working properly?
- Are the objectives being achieved?

This summary overview presents important elements that must be considered in developing a nationwide program using a systems approach. The Association of American Library Schools, through its Committee on Continuing Education states (AALS, 1972 a): "The gap between knowledge and application grows wider for several reasons: rapid advances in research; unequal distribution of opportunities for continuing library education; patterns of education opportunities and of dissemination of knowledge which are not efficient in terms of the librarian-student's needs." The gap will continue to grow wider and the present scattershot approaches will not universally narrow the gap, unless a systems approach is used profession-wide in planning, coordinating, and implementing continuing education for library and information science personnel.

FACTOR 3: BASIC ASSUMPTIONS CONCERNING CONTINUING PROFESSIONAL EDUCATION FOR PERSONS IN THE LIBRARY AND INFORMATION SCIENCE FIELD

At the start, to help a partnership of understanding, we wish to state our basic assumptions for the purposes of this study concerning continuing professional education for persons in the library and information science field. Those who read this report will need to ask themselves if they share these certain fundamental assumptions.

In general, we view continuing education as a prime means of assisting personal growth and the practitioner's ability which is directed toward the goal of increasing and sustaining library effectiveness in serving our society.

With this in mind, we endorse the following assumptions regarding the learner, the learning program, and the continuing education system that provides links between the previous two.

Assumptions Regarding the Adult Learner

The learner has the ability and the right to be a self-directing person whose basic purpose is to become more competent by acquiring the necessary knowledge, skills and attitudes to deal with a relatively immediate problem, task, or decision. Three elements are present for the learner -- the need, the effort, and the satisfaction. The learner's readiness to learn is rooted in the felt need to know, do, or be. The learner's past experiences provide a rich resource and base for new learning.

Assumptions Regarding the Learning Program

The continuing professional education program results in learning which has a high probability of being applied successfully to the work situation. Learning itself is a process of change, both for the individual and for the institutional site of employment. All programs need to be based on sound learning theory and need to incorporate an understanding of the process and implications of change.

For adults, learning is an active, rather than passive, process, with the most valid learning coming from a shared teaching/learning experience. Identified needs and clear objectives are essential for assuring good design and evaluation of the learning program.

Assumptions Regarding the Continuing Education System

The continuing education system -- the means of providing continuing education opportunities -- must stimulate, facilitate, and reinforce continuing education activities for the growth and development of learners and ensure maximum effectiveness of the information delivery systems serving our society. It should acknowledge and incorporate in its structure the previous assumptions regarding the learner and the learning program. It should include a constant need diagnosis process and assure that the administrative processes for the operational management of the organization provide a two-way bridge between the learner and the program.

FACTOR 4: USE OF INTERDISCIPLINARY APPROACHES

Familiarity with what is taking place in other professions and disciplines is vital in planning on a nationwide level for continuing education. The importance of this assertion is underscored by the findings of a Ford Foundation funded study of society and the professions conducted at the University of California over a period of thirteen years:

> Society is now so complicated that the day of the gifted amateur is gone forever. Without exception, every important national question is of such magnitude that it cannot be understood, much less resolved, without years of professional experience and education. Particularly startling, for it is unique to modern society, was the fact that while all major domestic issues are intrinsically professional, not one substantial problem can be resolved by a single profession, no matter how capable, acting alone. In other words, we have entered a new era where all important questions are multiprofessional and require a multiprofessional resolution. (Rothenstein, 1972)

The professions, generally have been criticized for failing to develop connections to other professions and failing to train practitioners in the skills of working collaboratively with other practitioners. If library and information science personnel are to help solve the problems of the city, of the environment, of social work, and of education, they will need to find ways to develop "... interprofessional teams managed by competent project managers who can weld the various talents of the different professions together into a team effort." (Schein, 1973, p. 34)

A diversity of talents is needed to develop effective library and information science teams. Continuing education opportunities are needed in which library and information science personnel have the opportunity to learn to work together as a team to solve problems with those in other professions. For example training in working together as a team is needed with: architects to build more effective libraries and information facilities; anthropologists and sociologists to ensure that the facilities and procedures are in line with prevailing cultural values so that they will be used when completed; economists to develop cost-effective information retrieval systems; lawyers and politicians to make possible the location of information centers in places ordinarily used for other purposes; engineers to design better automated retrieval systems; and managers, behavioral scientists, and social workers to help communities develop and effectively utilize the libraries and information center facilities that are available.

The kinds of interactions between professions and disciplines implied in the previous example should be considered by those who are planning at a nationwide level. The profession needs to recognize that training is necessary for practitioners of all levels, particularly, if they are to work effectively with other professions in responding to the problems of a modern, complex society.

The use of formats that emphasize interdisciplinary approaches by those outside librarianship is identified by Shera (1972, pp. 4-8) as one of the conditions in which continuing library and information science education has flourished. He goes so far as to say:

> One may also suggest that these programs seem most useful when they emphasize presentations by non-librarians, people who are experts in a field outside conventional librarianship, leaving to the librarians the problem of relating these specialities to library theory and practice.

He concludes that success of continuing education conferences and programs is, ". . .directly related to the degree of 'outside' participation offered."

In summary, if library and information science personnel are to be able to work effectively with clients and with other professionals, the continuing education opportunities that are offered will have to become more interdisciplinary and will have to integrate both applied and basic components of the behavioral and social sciences.

FACTOR 5: CRITERIA THAT MOTIVATE INDIVIDUALS TO PARTICIPATE IN CONTINUING EDUCATION

Personalized Criteria of the Practitioner

Since participation in continuing education programs in librarianship and information science is voluntary and not required by the profession for practice or promotion, the practitioner must be motivated to take advantage of the programs and resources offered.

Any continuing education programming for library and information science personnel runs the expensive risk of becoming inefficient busywork unless it meets the highly personalized criteria of the individual practitioner. These criteria are: (1) content related to the work situation; (2) accessibility; (3) convenient scheduling; (4) financial assistance; (5) continuity; (6) freedom of choice; and (7) recognition, rewards, and incentives.

These criteria are based on research findings in library and information science and related disciplines. One study of the factors that motivate librarians to participate in continuing education activities (Stone, E.W., 1969), found that librarians are most likely to be motivated to engage in continuing education when the content of the experience offered is directly related to the job situation and to the on-the-job activities being performed by them. These highly motivating factors tend to give the librarian a feeling of growth and achievement in job competence.

It was found that the deterring forces did not prevail so much due to the absence of the motivating forces, but were primarily associated with conditions in the environment, such as lack of time, academic requirements, costs, and lack of encouragement by the supervisor. Also among the deterring forces were incovenience of location and low accessibility. Practically speaking, this means that no matter how well a course is packaged, or how excellent the quality of the video-tape or convenient the location, these environment-related factors will not, in themselves, motivate library and information science personnel to a high level of participation; only content relevant to job-related needs will ensure high participation. However, it is important that designers of continuing education programs provide for these environmental facets, for if they are unsatisfactory or not present they will tend to discourage participation, regardless of content quality. Generally, this evidence supports the conclusion reached by Herzberg (1968) and his associates(Paul and others, 1969) relative to motivators and dissatisfiers in the job situation.

Another study in librarianship (Kortendick and Stone, E.W., 1971) found that conditions necessary to motivate students to enroll in formal post-MLS programs were partial financial support, leave of absence, curriculum content, and flexible scheduling. The Graduate School of the Department of Agriculture (1967), Hilgard (1956), Crawford (1962), and Jerkedal (1967), are but four of those writing in the area of continuing education who stress the importance of motivational factors in relation to professional development. These authors feel it is of prime importance that students be adequately motivated if changes in knowledge, comprehension, skill, attitude, or values are to occur as a result of participation in continuing education activities. Jerkedal (1967, pp. 229-30) concluded that the two most important factors that tended to cause changed behavioral patterns on the part of participants in advanced management education programs are: (1) the degree of motivation that impelled participants to take the training, and (2) the determination on the part of the organization sending the individual to take courses to impress upon every participant why the course would meet his or her own training needs -- ". . . in other words motivate him [or her] before the training starts" (Jerkedal, 1967, pp. 229-30). In summary, it is imperative that students perceive the proposed learning experience as personally important or significant to their jobs or careers, but as Dryer (1962) and E.W. Stone (1969) emphasize, other environmental factors must also be met to assure a high degree of participation. These studies have a number of implications for designing continuing education programs.

Content Related to the Work Situation

Top priority in planning for continuing education for library and information science personnel should be given to the content of the offering provided. For maximum participation, the content should be related to the work process or to the jobs persons are doing. This includes the opportunity for practitioners to use new knowledge in their own jobs, opportunity to be exposed to new and creative ideas which they can adapt to their job situation, and the opportunity to develop specializations. As content related to the actual job situation is the major encouraging factor for participation in continuing education activities, it is necessary to determine what content will actually meet the needs of library and information science personnel. Planning in a vacuum will never achieve a high rate of participation. Only planning based on participation by those to be served will ensure opportunities that meet actual needs.

The opportunities that are offered need to be clearly set forth and described in every detail so that library and information science personnel can ascertain if the activities are really geared to meet their individual needs. Individuals are unwilling to participate in activities if they do not understand the objectives and purposes to be accomplished. Substantial proof that the continuing education objectives will genuinely meet the individual's needs is essential for maximum participation.

Accessibility

Poor accessibility is a major factor that keeps library and information science personnel from participating in continuing education activities. Individuals should not be penalized in their efforts toward continuing education because of their distance from an organized center of learning or a meeting place. Correcting the problems caused by location calls for innovative planning, such as the use of (1) closed circuit talk-back TV to libraries, in combination with participative methods of learning; (2) taped programs that can be sent to self-directed learners; (3) use of programmed-instruction materials to be used on individualized teaching machines; and (4) video tapes or cassettes that can be used either by the individual learner or in a group situation.

Modern technology and new teaching methods make it possible for continuing education opportunities to be accessible to all library and information science personnel, whatever their geographic location.

Convenient Scheduling

Inconvenient scheduling is a major deterrent to participation in continuing education activities. Convenient scheduling means having available what you want when you want it. Responses to this and other studies in librarianship call for more flexible and imaginative scheduling of meetings, especially during hours when the majority of library personnel would have time available. For the individual learner, the employing library might serve as a teaching center where a director of continuing education would see that syllabi, magnetic sound tape records, films, slides, or cassettes, would be available. These materials could be used in the library or information center whenever the learner had free time or they could be borrowed to use at a time and place away from the library or information center, chosen by the learner himself. Dryer (1962, p. 79) suggests that the problem of scheduling be met by mailing materials to the practitioners, allowing them every opportunity to continue their education at the time, pace, and place chosen by themselves.

Another way to arrange convenient scheduling is for the employing libraries to provide time-off for continuing education activities. In the present study, it was found that of all the policies on continuing education suggested for employing libraries, "time-off to attend annual professional conferences, professional meetings, and short-term conferences" was ranked first for professionals (see Table 16 Appendix B). On the other hand, for paraprofessionals and technicians, "time off to attend in-house workshops on specific topics" was ranked first. The difference in the two priorities seems to reflect the attitude that professionals must go (or deserve to go) someplace else away from work to receive continuing education opportunities, while paraprofessionals and other supportive personnel must stay at work and have someone bring continuing education to them. Planners of continuing education need to consider carefully the attitudes that may be reflected in the answer to this item in the questionnaire survey.

This discrepancy deserves special attention, because it was found in the questionnaire survey that "attending professional meetings" and "participating in professional committees" were ranked by the complete sample of respondents as the most used or provided modes of continuing education (see Table 20 Appendix B), and next to workshops and institutes it was ranked the most effective of those modes used or provided (see Tables 20 and 22 in Appendix B).

The importance attached to in-house workshops on specific subjects and to in-house lectures, seminars, and conferences seems to indicate that a nationwide plan for continuing library and information science education should give particular attention to providing resources for utilizing this mode of instruction. It also seems to provide many opportunities for library schools to work out interface arrangements with employing libraries for leading these in-house programs.

Financial Assistance

Table 16 in Appendix B indicates that financial assistance received high ranking only for attendance at institutes, workshops, seminars, and tutorials. Courses, both credit and non-credit, received low rankings. Leaves with and without pay also received low rankings. In an earlier study (Kortendick and Stone, E. 1971), it was found that MLS librarians would only attend a post-MLS program if total or partial financial assistance was provided. The results from these investigations seem to indicate that for the majority of library personnel the course mode for continuing education is not a popular one. Workshops, institutes, seminars, tutorials -- in-house and away from the library -- are of the most interest.

Table 18 in Appendix B also shows that only a minority of the respondents believed that continuing education should be a requirement for a salary increase or for promotion.

Continuity

A number of interviewees stated that one of the weaknesses of the present provisions for continuing education in library and information science was that efforts were sporadic; one could not plan ahead because there was no visible continuity. Continuity has two aspects: (1) availability over a sustained period of time; and (2) availability of sequential materials of increasing levels of difficulty adaptable to different levels of library and information science personnel. What has been produced that has been evaluated as having high quality should be made available to individuals whenever they may wish to start their study -- individuals should be able to enter the system at any time.

Freedom of Choice

Freedom of choice provides for diversity of offerings. It is based on the assumption that: (1) ideal motivation consists of personal standards of excellence; and (2) education most beneficially occurs apart from regulation. Individual library and information science employees should have the right to choose any or all of the available programs and resources.

Tables 14 and 15 in Appendix B indicate the great diversity of needs reported by the respondents in the questionnaire survey. Only at a national level can programs be developed economically enough to meet these diverse needs that exist throughout the nation.

Recognition, Rewards, and Incentives

Until the last few years, participants in continuing education activities have generally received little or no recognition for their initiative. There is no universally accepted means of measuring non-credit activity. Some feel that the absence of a system to give recognition has tended to weaken the concept of education as a life-long process. It has also been pointed out that the lack of documented evidence has made it difficult to secure an adequate funding base for continuing education consistent with its commitment and needs.

Some educators point to the fact that lack of recognition has meant the lack of a strong motivation for individuals to participate in continuing education activities. According to Maslow (1943, 1970, pp. 45-46) the egotistic needs of man -- need for self-esteem and esteem from others -- are very strong motivators.

Maslow divides esteem needs into two categories: needs for achievement, adequacy, mastery, and competence; and needs for reputation, prestige, status, recognition, and appreciation. Herzberg (1959, 1966, 1968) had found from his extensive motivation studies, that the factors that motivate men and women in the work situation are achievement, recognition for work achievement, the work itself, responsibility, and advancement (refers not only to promotion, but to opportunities to grow and develop in the present job). Thus, the conclusion can be drawn that the desire for achievement and recognition will motivate people to participate in continuing education if there is some type of recognition for work achievement. The E.W. Stone (1969) study on motivating librarians toward continuing education was in accord with Herzberg's findings.

Barrett, in a widely cited study of research and development personnel concluded that the reward structure in terms of recognition, professional reputation, and advancement was seen as an important determinant of self-development efforts. "If organization members do not perceive a link between their development activities and the organization's reward system, the probability of active efforts to update knowledge and skills is lessened." (Barrett, 1970, p. 12)

Recognition, Rewards, and Incentives in the Professions

In order to stimulate greater participation in continuing education activities, employing organizations and professional associations are experimenting with devising ways to give recognition and rewards for continuing education activity. Some of these experiments are considered briefly in the following.

Engineering

The Committee on Recognition of Continuing Engineering Studies was appointed by the Engineer's Council for Professional Development (ECPD) because it felt a new approach was needed to stimulate the participation of engineers in continuing education courses in order to improve their effectiveness as employees and their own satisfaction as professionals. The new approach developed is a well-organized recognition system, based on (1) a mechanism to evaluate and record continuing engineering studies and courses in accordance with course evaluation criteria and (2) a system of accumulation of credit and the evaluation of the composite for recognition by awarding national Achievement Certificates (Jones, 1967).

Banking

The American Institute of Banking's recognition system is based on the awarding of three levels of certification (Cavalier, 1973). The Basic Certificate consists of 15 units of work. The Standard Certificate is an additional 21 credits; the Advanced Certificate is 30 additional credits. By the time the student has earned an Advanced Certificate, he has 66 credits of AIB work. At present, the Institute is issuing 300 Advanced Certificates per year as opposed to 5,000 Basic Certificates.

Medicine

At its Clinical Convention in December 1968, the American Medical Association House of Delegates established the Physician's Recognition Award for participation in continuing education.

> The Award was first offered during 1969. It was based on the continuing medical education activities carried out by physicians during the three-year period beginning July 1, 1966 and ending June 30, 1969. Over 16,000 physicians applied for the Award at this first offering, and about 75 percent of the applicants were found to be qualified .
>
> The purpose of the Physician's Recognition Award is to accord recognition to physicians who participate regularly in continuing medical education and to encourage other physicians to engage in this important activity. The AMA strongly believes that all physicians should continue their education on a regular basis throughout their professional careers (Physicians Recognition Award, 1970, pp. 1-2) .

The award is granted for a minimum total of 150 credit hours of continuing medical education that are earned over a continuous three-year qualifying period. At the end of the three-year period, a physician who has met the requirements receives a certificate that is valid for three years. During the three years that his certificate is valid, it is expected that a physician will be earning the credits to qualify for another award when his certificate expires. There is a non-refundable application fee of $5.00 which partially pays for the cost of review and the handling and mailing services.

Nursing

Conscious of the need in the nursing profession for a means of quantifying and recording the involvement of nurses in continuing education, the American Nurses' Association (ANA) Commission on Nursing Education endorsed the use of the continuing education unit (CEU) in December 1971. "The Commission views the CEU as a means of recognizing individual nurses' participation in non-credit continuing education activities in nursing." (American Nurses' Association, 1973, p.28)

The Continuing Education Unit is defined as follows: ten contact hours of participation in an organized continuing education experience under reponsible sponsorship, capable direction and qualified instruction.

The use of the CEU is specified. Included in the system are classes, lectures, workshops, symposia, institutes, short courses, organized independent study, etc. Types of study ordinarily not awarded continuing education units are:

1. Any program carrying academic credit
2. Programs leading to high school equivalency certificates or diplomas
3. Organizational orientation training programs
4. Short duration programs only casually related to any specific upgrading purpose or goal

The statement concludes:

> The acceptance of the continuing education unit is just one example of finally arriving at a suitable means of recognizing and rewarding individual and institutional efforts in the pursuit of continuing education (American Nurses'Association, 1973).

Industry

An appealing concept of recognition is provided by the "Bank Account" Policy for Continuing Education of the Research and Engineering Division of the Kimberly-Clark Corporation.

First introduced in 1965, the plan was designed as a way of establishing an organizational environment which would encourage scientists, engineers, and technicians to maintain and extend knowledge in their own and related disciplines. Its overall purpose is to provide an opportunity for each person to carry out development activities which contribute to the individual need for personal and professional growth and to the Division need for more effective performance results.

Basic principles of the program provide time and money allowances in the "bank account." Recognizing that development of any individual is accomplished primarily through his own intiative and motivation, the company "can only provide the climate and opportunities which encourage individuals to develop to their full potential " (Kimberly-Clark Corporation, 1968, p. 5).

Each individual applying for "bank account" allowances must have participated, with the help and advice of his immediate supervisor, in the formulation of a plan that states his objectives for development.

Ministry

The Commission on Continuing Education of the United Presbyterian Church has recommended the establishment of a recognition system. The key aspect of this program would be that those who meet standards for effective participation in the five-year educational program would be designated "Fellows in Ministry." Those wishing to receive this designation would:

> . . . be examined on their written reports of several completed projects of ministry, on their knowledge of literature relevant for the practice of ministry, on their ability to plan ministries, to deal with difficult problems that commonly arise in ministry, and to evaluate their own ministries and those of others. (The United Presbyterian Church in the United States of America , 1969, p. 85)

Another type of recognition is provided by the new ecumenical "Academy for Parish Clergy " (Ibid., p. 74). In this case, it is sustained membership itself that supplies the recognition factor. Any pastor may become an active participant in the program of the Academy, but membership requires commitment to a strict study discipline: two weeks out of every year spent in Academy-approved study, and involvement in regionally-based research projects related to the work of his own church. Failure to maintain the discipline will result in loss of membership. Those who drop out are not allowed to return.

Medical Technology

One of the most completely organized recognition systems is the Professional Acknowledgement for Continuing Education (P.A.C.E.) system, designed by and for practitioners in Medical Technology in 1973, and based on the use of CEU and a centralized recording system for the whole profession (Roach, 1973, pp. 17,21). The "acknowledgement" comes in two forms. First, at regular intervals participants in the program receive a certificate indicating their participation in continuing education activities, and the agency where the individual works is notified of the award as well. Second, special certificates are issued to individuals meeting certain levels of participation defined by the P.A.C.E. committee; these relate to the total number of CEU units. Participants in P.A.C.E. and those in the profession at large receive notification of all acknowledgement activities through a publicity program.

It seems integral to any plan of measuring continued competency that the question of accountability must be dealt with. The problems posed by the question, "Who will answer those questions dealing with the how, when, and where of those experiences deemed necessary to prove continued competency ?", seemed to be well met by the P.A.C.E. system.

Library and Information Science

Today in library and information science there is no generally accepted recognition system for continuing education. Interest has been shown in exploring the possibilities, however, and at present a committee of the Public Library Association is investigating what other professions are doing in the area, with the purpose of coming up with some recommendations.

The Continuing Education for Library Staffs in the Southwest (CELS) group lists as one of its goals: "To develop a reward system, consistent with the national plan, recognizing the responsibility of the employing institution."

In the interviews conducted as part of this study, there were widely differing opinions about the development of a recognition system. Some thought that a national planning body should be responsible for developing a system; some thought that it was the responsibility of the American Library Association to develop the system, but that the national planning body should implement it and keep individual records of all those who participate. Others thought that a system of centralized record keeping was, in itself, threatening to the individual, and that if any records were kept at all, they should be kept by the individual's employing library or information center until he or she will have moved on to another place of employment. Then, the individual's record would move with him or her.

Table 32 in Appendix B shows the type of rewards, recognition, and incentives currently being provided for participation in continuing education in the library and information science community. Table 33 in Appendix B indicates which rewards, recognition, and incentives should be provided in the future, as perceived by the respondents. These Tables make a number of points that have implications for nationwide planning.

First the overall conclusion seems to be that there should be a general expansion and increase in the rewards, recognition, and incentives provided for continuing education activity. This is evident from the circumstance that, for each item, more respondents suggested the use of rewards than the actual number of respondents who indicated rewards were currently being provided. Thus while only 22 percent of the respondents indicated that promotion, pay raises, and record of continuing education activity were actually used as rewards, for the same items in Table 33, the percentages lie between 52 and 56 percent.

Second, these Tables show that four types of reward, recognition, and incentives are the most universally recognized as they rated at the top of the list in both Tables: creating a stimulating job, promotion, pay raises, and record of continuing education activity.

It is interesting to note that the respondents indicated that pay raises and promotions should be used as a mode of recognition, reward, or incentive, but conversely, only a minority perceived continuing education as a requirement for promotion or salary increase (see Table 16).

Third, "giving nationally recognized continuing education units" for all personnel ranks high in the "should be" Table 33, while it ranks low in the "currently provided" Table 32. This evidence supports the recommendation that serious consideration be given to the use of the CEU as a means of acknowledging non-credit continuing education activity.

Fourth, in both the "now" and the "should be" Tables, "record of continuing education activity kept for each individual" is given a high rank. Unfortunately, the data does not indicate if the respondents would be equally, less,or more interested in having a centralized national record system, or if they only want a record keeping system in their own library and for their own records.

Third, in both the "now" and the "should be" Tables, "creating a stimulating job" receives high rankings, in keeping with the motivation theories cited earlier in this section. This also reinforces the comments presented in the section emphasizing the importance of relating the content of continuing education activities to work being performed in the library.

Table 34 in Appendix B indicates that at present, the group most likely to employ recognition procedures is regional library associations. Of special concern is the finding that while 47 percent of the complete sample had made attempts to alter the organizational climate in order to encourage continuing education, and 34 percent had attempted to alter the organizational structure to encourage participation in continuing education activities, only seven percent of the complete smaple had ever evaluated the effectiveness of their present recognition procedures.

A question that is different from, but closely related to rewards, recognition, and incentives and frequently appears in the literature along with discussions of these items, is the controversial subject of certification. The responses to the question about attitudes toward certification and re-certification are, therefore, of particular interest.

Table 35 in Appendix B indicates that in terms of attitudes toward certification, a strong majority of the total survey group (77 percent for certification and 69 percent for re-certification) was in favor of certifying and re-certifying as a means of maintaining the competency of library and information science personnel. However, it must be noted that the respondents' favorable attitudes toward certification were not without reservation. Comments made by the respondents seemed to imply that the respondents favored certification but doubted that it could ever be implemented in a viable way.

A sample of the comments may help give the reader an idea of the wide range of feelings about certification:

-- in favor of certification only if it "seems important to the individuals involved"

-- certifying would be "as impossible as ascertaining the quality of a librarian"

-- in favor of certification "if effectively restructured from present form"

-- depends on agency given responsibility for administering certification

-- prefer a "competency-based, not credential-based" certification

-- in favor of certification "depending on the allowance for many routes to re-certification"

The three groups expressing the most negative feelings about certification were national libraries, academic libraries, and special libraries. The two groups expressing the most positive feelings were state library agencies and school libraries.

If library and information science personnel are to be able to deliver quality service to American society today, they must themselves engage in continuing education. Furthermore, library and information science personnel are only going to engage in continuing education in a widespread manner, if the motivational factors summarized here (and characteristic of all professions) -- quality content related to the work situation, accessibility, convenient scheduling, financial assistance, continuity, freedom of choice, and recognition for client -- are met. The primary objective in developing a nationwide plan is insistence on pivoting the entire plan on the needs of library and information science personnel as lifetime students. Only a national assembly of educational partners, possessing multi-disciplinary knowledge and skills, can provide national access, everywhere, to continuing education programs and resources.

CONTINUING EDUCATION CONTENT NEEDS OF LIBRARY AND INFORMATION SCIENCE PERSONNEL

In its call for a proposal, the National Commission on Libraries and Information Science asked that the continuing education needs of library and information science personnel be identified.

Tables 14, 14A, 15 and 15A in Appendix B present data in answer to this request. Respondents were asked to list, for each of the target groups of library and information science personnel, the continuing education needs they felt were either not being met or were being met poorly at the present time. This question was purposefully asked as an open end question because the Project team did not want to influence the respondents by presenting a structured list that might narrow the range of answers. The consequence of this decision has produced a very long list of needs, with many of them being reported only once or twice by the respondents.

The outstanding characteristic of the current needs is their similarity for the different groups, with only a few differences. In ranked order, starting with the highest, the overall priorities are (1) updating, (2) management, (3) human relations, (4) automation, and (5) non-print media. The chief variation from this pattern is, as might be expected, for the trustees. The needs for them concentrate on library goals, library functions, legislative know-how, and knowledge of library legislation. These items do not appear among the top priority needs for any other group.

Table 14 indicates that three to five years from now there will be mainly permutations and combinations of the same few areas, with the following exceptions:

1. Updating has vanished except in one instance -- rank 4 for library technicians was formerly rank 1 for this group. (hopefully, indicating that in the future the goal of "overcoming" obsolescence by "preventing" obsolescence will be reached)

2. Human relations has moved up from rank 4 to rank 1

3. Non-print media has moved to second place from its previous ranking of fifth place

4. Management has moved from second place to third

5. Automation retains its fourth place status

6. Public relations has been added with a rank of 5. It ranks fifth in priority for all target groups except for trustees, where it ranks second, and for technical information specialists, where it is not among the top five priorities

The greatest across-the-board change between the projected ranking and the present ranking is in the trustee category. Only one item still remains from the "now" listing -- legislative know-how -- and public relations, non-print media, management, and human relations have been added, in that order.

The high priority continuing education content needs enumerated by the respondents in the present study are validated by other recent studies, some of which are cited in the following paragraphs. These studies also find that automation, management, and human relations are top priorities, with non-print media gaining importance in more recent studies.

Kortendick and Stone (1971, pp. 134, 292-308) found that among federal librarians in all types of libraries, top ranks for courses and workshops now and later went to automation of library processes, information retrieval systems, and information processing on computers, and that the next group of consistently high rankings for courses and workshops were in the areas of administration and management and in human relations. Non-print media ranked fourth in the workshop category and fifth in the "course later" category.

De Prospo and Huang (1969, p. 25) of Rutgers sent a questionnaire to a stratified sample of 184 academic, public, and school librarians. They found that the areas in which the administration of these libraries most urgently wanted continuing education were (1) application of machines, (2) personnel administration, and (3) evaluation of library problems. After these there was a drop in frequency, and the next three areas were communications, systems analysis, and budgeting. From the data collected, the authors concluded that "librarians seem not to be familiar with the more recent developments in the field of administration and management."

In New York, Meyer (1970) conducted a statewide survey of continuing professional education needs of public libraries (small, medium, and large libraries). Top priorities were for training in (1) group dynamics, (2) personnel development, and (3) management skills.

In 1969 the American Association of School Librarians (AASL, 1969) sent out a questionnaire to members asking for the self-perceived needs of school librarians in the area of continuing education. Whether the results were analyzed by weighted choices (1, 2, 3) or all grouped together, they were the same. Coming out on top each time was "management philosophy and techniques."

Areas topping the 50 item list of the State University of New York at Buffalo's 1972 alumni survey for needed courses in continuing education were, in rank order with the highest first: administration, media uses, media creativity, media centers, nonbook materials, management and collection policies, government documents, library systems analysis, automation, and computer basics (Bobinski, 1973).

A study at The Catholic University of America in 1974, based on a curriculum objectives questionnaire, showed that the greatest degree of increase in competencies needed now and five years from now as perceived by alumni was in the following areas, ranked with the highest degree listed first:

1. Retrieve information from variety of data bases
2. Cooperate in shared cataloging by computerized techniques
3. Apply principles of computer control to circulation functions
4. Apply principles of computer control to acquisition functions
5. Apply principles of selection of non-print materials
6. Apply principles of computer control to developing information retrieval systems
7. Apply communication processes in modern society
8. Identify needed change, plan for implementation of change, design strategies, carry out change, evaluate (Stone, E.W., 1974b)

Two recent studies reflected similar priorities with one exception, namely the emphasis on the new technology. The interviewees in Martin's study, A Strategy for Public Library Change (Martin, 1972, p. 35) seldom mentioned automation as a major problem. In a list of 12 critical programs in public librarianship, listed in order of emphasis, "technology -- failure to serve libraries, failure of libraries to adapt" was eleventh (Martin, 1972, p. 26). The Martin and Duggan (1973) study, The Continuing Education for Library Staffs in the Southwest: A Survey and Recommendations, found that continuing education supporting applications of technology, in both multi-media emphases and automation, were not top priorities. C.W. Stone's study, Needs for Improvement of Professional Education in Library and Information Sciences (1973) also reflects these priorities. Preliminary oral presentations of the Bureau of Labor Statistics' analysis of manpower needs of library and information science personnel (scheduled for publication in the summer of 1974) indicate that demand for automation, management, human relations, and audio-visual competencies will increase for employees in all types of libraries.

In summary, priority unmet needs existing now and in the next five years that should be considered in nationwide planning present the following pattern (based on data in Tables 14 and 15 in Appendix B) as shown in Table 2.1.

TABLE 2.1.

FIVE HIGHEST RANKING CONTENT AREAS, 1973

RANK ORDER OF CONTENT NEEDS	TARGET GROUPS							
	All		MLS Librarian		Operating Librarian		Paraprofessional	
	Now	In 3-5 yrs.	Now	In 3-5 yrs.	Now	In 3-5 yrs.	Now	In 3-5 yrs.
1	updating	human relations	management	management	updating	management	updating	human relations
2	management	non-print media	updating	automation	management	non-print media	evaluation	non-print media
3	human relations	management	automation	human relations	non-print media	human relations	human relations	automation
4	automation	automation	non-print media	non-print media	opportunities for degree	automation	reference	library skills
5	non-print media	public relations	human relations	public relations	automation	public relations/library skills	supervision	public relations

This pattern suggests the value of preparing problem situation offerings in these areas slanted toward the different skill levels that the target groups need within the library organization and without to meet the needs of the resident population. It also suggests that background materials and readings, computer applications, and audio-visual materials should all be developed modularly so that these modules can be sequenced in different order for different purposes and can serve as useful resources for those developing programs to meet the specific objectives of an individual library.

The data in Table 16 in Appendix B also emphasizes the fact that besides the top priority content needs already discussed here, there exists a wide variety of content needs that can probably only be met effectively by designing self-learning courses, or modules, for individual study. The wide range of these needs seems to indicate that it would be unrealistic to plan extensively for group offerings, but that taking the whole nation into account, the combined needs make the demand for individualized programs economically feasible. This is one of the advantages of planning on a nationwide basis. In one geographical area there is often not enough demand to justify a given offering that only meets the need of a very few, but when the whole nation is used as a background for planning, combined needs from all geographical areas would yield enough demand to warrant the development of programming and resources to meet these less-than-high priority needs.

A recent study highlighted the necessity and importance of continuing assessment of needs relative to the content of continuing education offerings at every level of library personnel and throughout the nation by geographical locations (Stone, E. W., 1970). This study showed that the primary reasons librarians became involved in continuing education activities relate to the content of the programs offered -- whether or not the content of the educational opportunity offered is directly related to the work processes in which the librarian is engaged at the time. This finding is in keeping with those of Herzberg (1959, 1968) which state that motivating factors of work are achievement, the work itself, responsibility, and advancement. As Crawford (1962) has pointed out, the Herzberg studies point to the importance of the work itself and indicate the importance of taking work factors into account when building continuing education programs. The implication is that library and information science personnel will use only those programs and resources they feel will fill their job-related needs. Indeed, this was the reason given by respondents in the E. W. Stone survey (1970) for not having taken any courses since receiving the MLS degree.

FORMS OF CONTINUING EDUCATION FOR LIBRARY AND INFORMATION SCIENCE PERSONNEL

This section discusses the modes and methods of continuing education for library personnel as perceived by the respondents to the survey instruments of this Project, and includes references to the continuing education literature in these areas.

In introducing this discussion it should be noted that several respondents took the time to comment that they have found that the effectiveness of any mode is directly related to the objectives of the training or course and to the motivation of the student. Thus, the choice of mode must be based upon the desired objectives, as well as on the make-up of the target population. This same observation also applies to the choice of methods used within the various modes. Another overiding consideration is that both modes and methods must be flexible enough to accomodate students with different learning styles and to encourage students to "learn how to learn," so that they will be more able to pursue their own continuing education efforts throughout their life-times (Schein, 1972, p. 131).

MODES OF CONTINUING EDUCATION

Tables 20-25 in Appendix B refer to questionnaire item IV -- Modes of Continuing Education. Of the 27 modes identified in the questionnaire, the modes most often used or provided by the respondents of the complete sample are indicated in Table 20. The three highest ranking modes are:

1. Attending professional meetings and/or conferences (checked by 88 percent of the respondents)
2. Participation in professional committees or task force groups (checked by 88 percent of the respondents)
3. Workshops (checked by 81 percent of the respondents)

The four modes respondents of the complete sample found to be the most effective of those they had used are indicated in Tables 20 and 22 in Appendix B, and are:

1. Workshops (checked by 74 percent of the respondents who had used this mode)
2. Institutes (checked by 67 percent of the respondents who had used this mode)

3. Attending professional meetings and/or conferences (checked by 57 percent of the respondents who used this mode)

4. Participation in professional committees or task force groups (43 percent of the respondents who used this mode)

The modes least often used by the respondents of the complete sample, or those receiving the lowest rank, were:

1. Provision of materials for home study (checked by 12 percent of the respondents; it ranked 26th)

2. Correspondence courses (checked by 12 percent of the respondents; it ranked 27th (Table 20, Appendix B).

The modes not being used or provided by the complete sample respondents but that were most often chosen as "would like to have used or provided" are displayed in Table 24, Appendix B. Summarized, these modes were ranked in the following order:

1. Short intensive courses with or without credit, sponsored by university and/or library association

2. Institutes

3. Invited conferences (groups of experts)

4. University credit courses specifically designed for the continuing education student

5. Provision of information through a selective dissemination system

6. Attending professional meetings and/or conferences

7. Oral or written informal reports by those who have attended conferences, seminars, etc.

8. Participation in professional committees or task force groups

9. Travelling programs

10. Internships

An excellent source reviewing a wide array of modes provided by academic institutions is the annotated bibliography presented in Continuing Continuing Education for the Public Service (Institute for Local Self-Government, 1971, pp. 111-204). It also describes innovative and creative modes in use around the world.

Also, a recent review of continuing library education as viewed in relation to other continuing professional education movements (Stone, E.W., 1974a) contains a chapter on modes of continuing education in which each mode is discussed in some detail, and a summary of pros and cons for each mode given. Therefore, a detailed summary will not be presented here. Certain conclusions drawn from the literature review, however, are integrated into the following discussion of the implications of the data from the present study concerned with continuing education (as summarized in the first paragraphs of this section).

The importance of attending professional meetings and participating in professional committees or on task forces is given high ranking, but there is a serious question concerning how much opportunity paraprofessionals, the third ranking target group for continuing education opportunities, have for involvement in this type of activity. Concern is deepened by the fact that types of individualized learning such as home study and correspondence courses, which could be made available to paraprofessionals on an equal basis with all other levels of library personnel, rank at the bottom of the modes used.

The literature indicates that other professions, such as the health sciences, architecture, and engineering are making wide and effective use of modes that are not the same traditional ones receiving highest rankings in this section. These new patterns take into consideration the personalized criteria of individuals seeking continuing education opportunities, such as continuity over a sustained period of time and convenience in regard to time and place of modes. Nationally planned, coordinated continuing education, it seems, would create opportunities for "open admission" and "open degree" programs and for an array of networking approaches and services, as recommended by C.W. Stone (1973, pp. 47-48). These are not now being widely provided.

The modes reported in the present survey with high rankings are the same modes that have been used and relied upon and reported by surveys (Stone, E. W., 1969 c; Kortendick and Stone, E.W., 1971). In fact, the predominant use of traditional modes may account for the low percentage of library personnel participating in continuing education activities. Fifty-seven percent of the MLS librarians in the Kortendick and E.W. Stone study (1971), for example, had participated in no continuing education activities since receiving their degrees, although the average number of years they had been in professional positions in libraries was 14.

The breakdown by respondent group of modes of continuing education indicates that the various groups do not all use the same modes. The implication is that any national plan must be able to respond to any group's specific needs. Those groups interested in building new patterns of continuing education should be able to look to a profession-wide, nationally planned coordinated operation to meet their special needs.

The data on the modes used in continuing library education today and on those not used, but that respondents felt were needed,leads the writers of this report to suggest that the profession needs to think a bit more boldly. This question should be asked: If one were really to redesign continuing education for library personnel at all levels, how might it be organized for more effective and economical continuing education to which all library personnel would have equal access? In suggesting answers for this question in the model we have developed, the writers go beyond data specifically collected in this study. But the proposals are based on thinking and practices that are being and have been planned and thought through in other professions which take into full consideration the personal criteria of the individual learner as well as the various new modes made possible by use of the new technology.

In summary, it should be emphasized that modes (type of format used) and methods (learning methodologies used in any given format) must be chosen carefully so that they are appropriate not only to the subject matter, but also to the adult individual and his or her learning tactics. Zachert (1972, p. 42), in her significant and penetrating article, "Continuing Education for Librarians: the Role of the Learner," states the issue forcefully:

> Library science education has traditionally conceived of its students as children. Inherited curricula and teaching methods reflect this orientation, which has not yet been seriously challenged either at the level of basic professional education or at the level of continuing education. The most pregnant generalization from adult learning research is that adults learn differently than children; the inescapable conclusion is that education for adults must be planned and implemented differently than education for children. Acceptance of this generalization augurs for change.
>
> The ultimate success or failure of the efforts for continuing education may well rest not on how perceptively the planners and the teachers understand the great perplexing problems of librarianship, but on their perception of how adults learn. ... To me the almost total lack of perception about how adults learn is the greatest single flaw in continuing education today, pervading the ranks of planners, teachers, and library administrators alike."

METHODS OF CONTINUING EDUCATION

Throughout the professions today there is widespread dissatisfaction with the methodologies that now characterize continuing education (Institute for Local Self Government, 1971, pp. 34-35). Frank Sherwood, Executive Director of the Federal Executive Institute, is quoted in Continuing Continuing Education for the Public Service (Institute for Local Self Government, 1971, p. 45) as stating that continuing education has been conducted:

> ... exactly like a high school class. An expert is put at the head of the room, expected to convey his information to the less informed, and to take responsibility for the transmission process. The vehicle of communication is typically a lecture -- generally judged the worst possible way to get across information. ... This traditional approach to learning reinforces behaviors that I believe are antithetical to effective performance in an organization ... [continuing education] ought to emphasize the assumption of responsibility for the learning, the implications of interdependency, the ambiguity of data as it applies to a given situation, and, the requirements for efficiency in the adult learning process.

Like the data obtained in the survey regarding modes of continuing education, the data regarding methods used reflects the same criticism that is being applied to continuing education methodologies in other professions. For example, Table 26 in Appendix B indicates that the methods used or provided the most in continuing library and information science education by the complete sample respondents are the discussion and lecture methods. The two least used are "talk-back cable TV" and "dial access" systems. In both the complete and partial sample (Tables 26 and 27 in Appendix B), the same trends stand out; that is, traditional methods such as lectures, discussions, and films are used or provided most often, while innovative methods such as dial access and cable TV are least often provided. The three modes found most effective by the respondents of the complete and partial sample are presented in Table 2.2.

TABLE 2.2

THREE MODES FOUND MOST EFFECTIVE, 1973

Rank	Methods	Percentage of Respondents who Used the Method	Percentage of Respondents Using the Method who Ranked it Among the 5 Most Effective Methods
Complete Sample (associations, national libraries, accredited library schools, and state agencies)			
1	Lecture	88	46
2	Discussion	78	60
3	Slides	70	29
Partial Sample (Employing libraries, and unaccredited library schools)			
Libraries			
1	Discussion	82	68
2	Lecture	68	22
3/4	16 mm film	62	38
3/4	Slides	62	19
Unaccredited Library Schools			
1	16 mm films	93	31
2	Slides	93	31
3	Discussion	93	38

(See Tables 27-29 in Appendix B)

It is important to note that of the respondents using "individually prescribed instruction," half found it to be effective.

Of the methods not used by the respondents of the complete sample, "video-tapes" were reported to be the most "liked to have (been) used or provided." (Table 30 Appendix B.) "Cable TV" was the second most "like to have (been) used or provided." Table 30, Appendix B indicates that those respondents who did use or provide video-tapes and/or cable TV were split as to whether or not the methods were effective. Thirty-eight percent of those using video-tapes felt it was an effective means; 29 percent of those using cable TV (or two out of seven) found it to be one of the five most effective methods.

IMPLICATIONS FOR DESIGNERS OF CONTINUING EDUCATION PROGRAMS

According to the Continuing Continuing Education for the Public Service study (Institute for Local Self-Government, 1971, pp. 45-46) in its review of the format of continuing education, the most frequently mentioned shortcomings of present formats are:

> ...a failure to (a) provide an interdisciplinary curriculum, (b) incorporate the latest conceptual insights and methodological approaches such as systems analysis, (c) tap the special expertise of the practitioner and uninspiring formats and presentation of material.

Generally, these appear to be weaknesses also reflected in continuing education offerings in the field of library and information science.

The writers of this report fully realize that no one can tell those designing continuing education what modes and methods should be used; these must, of necessity vary with needs of situations and with the needs of individuals involved. As Schein (1972, p. 128) emphasizes, however:

> ...one can facilitate [the individuals'] diagnosis of themselves and can provide alternatives for them to think about to help them scan their environment in search of a solution that fits their particular needs.

In designing new patterns for pre-service professional education, Schein (1972, pp. 129-149) suggests four essential changes. In designing a bold new scheme for continuing library and information science education, similar changes relative to the modes and methods of continuing education are proposed.

The first change is that new kinds of learning modules be designed which:

1. Are flexible enough to accomodate students with different learning systems and different skill levels in the work situation
2. Take into account the way students learn, and therefore consider a wide range of methodologies
3. Are designed by a faculty of experts working as a team in the area of concern
4. Involve consideration of ways to integrate the use of various kinds of resources (as opposed to taking one element such as the computer or interdisciplinary seminar and pushing it to some extreme form)

According to Schein (1972, p. 135):

> ... the important issue in creating new learning modules is to give up the artificial constraints imposed by traditional higher education methods and calendars. The modules do not have to be of any given length; they do not have to be standarized.

These modules do not have to be taught by one person; they do not have to involve lectures, readings, and examinations; and they do not have to give credits. They do have to be designed to meet the personalized critera -- high quality content; continuity over a sustained period of time; sufficient variety to assure freedom of choice; convenience in time, place, and pace of learning; and personal satisfaction for those who use them -- if they are to be used by library and information science personnel seeking to continue their lifetimes of learning.

The second change is that continuing education leaders and teachers must be sought who:

- Believe that students benefit most if they are stimulated to learn, with emphasis on the learning process as a complex process between the teacher, the student, and whatever is to be learned -- as opposed to those who feel students benefit most if they are taught, with chief emphasis on the activities of the teacher in the situation, rather than the activities of the student.

- Are themselves continuing learners. This criteria for teachers and leaders of continuing education programs was also reiterated strongly in the interview that the Project team had with Dr. Houle. He emphasized the importance of faculty serving as role models in pre-service and continuing education -- to the end that students, by a process of socialization, would come to recognize the value of continuing education. His contention is that if the idea is set in pre-service training and carried over to continuing education, there is a solid foundation on which to build for later acceptance of continuing education. Houle (1967, p. 42) notes:

  > Very important, too is the personal example provided by the faculty members. When professors are continuing learners, that fact is made graphically evident to their students; to the lesson of precept is added the very powerful lesson of example. And such efforts should express a spirit of inquiry underlying the approach to teaching ... Facts must be taught, but always with the context of a constant and continuous exploration of the unknown. If you teach a person what to learn, you are preparing him for the past. If you teach him how to learn, you preparing him for the future.

- Have the ability to serve as leaders or as members of a team. In continuing education modules, sometimes one role is required and sometimes another. We share the conviction with Schein (1972, p. 140) that in the development of modules by a team of professors or experts in the field, it is not possible to integrate:

  > ...the basic, applied, and practical elements in the new modules unless the professors who ordinarily would be teaching the different elements can get together, share their perspectives and attitudes about both content and learning theory, and develop enough mutual trust and communication to be able to go beyond compromise solutions to genuine integrations of their points of view.

- Have a knowledge of the psychology and sociology of learning. For example:

> ...almost all learning theories put great emphasis on the need for the learner to make some response which leads to some feedback or information as to the results of his response, which, in turn leads to a better response. (Schein, 1972, p. 141)

Thus, in the development of home study and self-instructional modules, there would be provision for regular feedback between the learner and the developer of the module.

- Possess some skill in and knowledge of career counseling and advising students. If continuing education relates to the present job situation and if it is to be made available to all levels of the library staff, those who lead continuing education programs need to be able to help, for example, a paraprofessional set realistic career objectives and find the continuing education activities best suited to his or her needs. One of the concepts proposed in the model is that of having leaders in continuing education serve as Linkage Agents to help individuals in their self-directed learning. For such a concept to be effective, it is essential that continuing education leaders have an attitude of interest and concern for those they counsel, as well as a precise knowledge of the various resources that are open to an individual.

- Must have a like and a respect for people -- learners, colleagues, and the citizens for whom the continuing library and information science education is ultimately designed. The more flexible the system that is designed, the more interpersonal commitments of all types that will be necessary on the part of the leaders and teachers. Those who prefer research and scholarship to interpersonal relationships will probably not find the expanded role expected of leaders of continuing education a comfortable or a secure one.

- Must be willing to experiment with innovative modes and methods in developing modular programs. Without a drive toward innovation, the same modes and methods will be reported year after year in surveys. Leaders must be found who feel a sense of mission in showing others how new technology and new methods can facilitate the learning of adults and who can help tear down barriers that keep individuals from engaging in continuing education.

The third change is that new kinds of structures and processes must be found that are flexible, and that provide for (1) involvement of as a wide a range of persons as possible in assessment of needs, (2) recognition of continuing education activities that are engaged in, (3) design and implementation of delivery systems facilitating equal access to opportunities in continuing education, and (4) input from clients. Suggestions in these areas are developed in connection with the proposed model.

The fourth and final change is that provision be made for perpetual diagnosis and evaluation of the content, modes, and methods used in the continuing education of library and information science personnel. A process of perpetual diagnosis and and evaluation should be established in order to keep a constant flow of information coming back and thus to determine if goals and set objectives are being reached. Two needed areas of evaluation were suggested by several interviewees. The first is a research study to determine if library and information science personnel who have consistantly participated in continuing education programs are performing better in their jobs than those who do not engage in continuing education. The second is to assess whether the resident population is getting better library and information service as a result of continuing education efforts of the profession.

In summary, these are some of the elements that we believe a bold, dynamic nationwide plan of continuing education should incoporate into its design in the areas of modes and methods of continuing education: the use of flexible modules developed by innovative leaders and teachers who are themselves continuing learners and who serve as role models for the profession; and who are knowledgeable in learning theory, and career counseling, and have both a respect for people and the ability to serve as leaders or members of a team. Since this breaks new ground, there may have to be a component of re-education of teachers, for some would not be able to teach in this "new" way.

IMPLEMENTATION OF CONTINUING EDUCATION IN OTHER PROFESSIONS

The first system design task of this Project was to establish a conceptual framework upon which a nationwide plan for continuing library and information science education could be built, with the mission of improving individual and organizational competence in order to perfect the quality of library and information service to society. A conceptual framework was required because there was no known operational system of encouraging a network and exchange of continuing education resources that was as comprehensive as that outlined by the National Commission on Libraries and Information Science. Specifically, the Commission called for a national program that would embrace the continuing education of both professionals and paraprofessionals; would involve all levels of institutional support: state, regional, and national associations; state and national libraries, and schools of library and information science; would outline a national framework for the program; and would ensure quality content of the educational experience. In addition, the Project team realized that the system design needed to serve as a bridge between theory and practice; that it needed to incorporate criteria for meeting the overall goal; and that it had to be acceptable, realistic, feasible, and capable of long range effort -- in other words -- workable.

Investigations for the design were made from five different perspectives: first, the collection and review of survey data collected by the Project from all related groups, and from individuals, who in the opinion of the Advisory Board of the Project, constituted a representative sample of those knowledgeable in the area of continuing education both within the area of library and information science and in other disciplines and professions; second, a review of the literature of adult and continuing education generally; third, a review of continuing education literature and a search for prototypes within the field of library and information science; fourth, a review of the literature of continuing education and a search for prototypes in other professions and disciplines ; and fifth, a review of knowledge utilization models.

The recent upsurge in continuing education in all disciplines and professions has produced a vast amount of literature that makes any complete review a virtual impossibility. Since the Project Director had completed a 699 page work relating continuing education literature in other professions to the field of library and information science, including a lengthly annotated bibliography immediately before the completion of the present study (Stone, E.W., 1974 a), the limited time available for a literature review in the present Project was concentrated on the search for prototypes in other disciplines and professions, although during the course of the Project many additional items from professional continuing education literatures were found and used in addition to the materials previously assembled and reviewed. The prototypes will be highlighted in this section. References are listed in the bibliography along with significant new references not included in the extensive literature review cited above.

SEARCH FOR PROTOTYPES

Before highlighting some of the prototypes that have been examined in other disciplines and professions as well as in library and information science, it is important to recognize that, as Houle points out, different professions have different patterns of work, and what might be the best or ideal method for one group might not be the most effective method for another. Therefore, to avoid distortion, it is necessary to recognize that service provided by professionals follows several different patterns; and that each group has its own dominant way of working, though of course, there are many individual exceptions. Houle (1970) identifies three basic patterns:

> THE ENTREPRENEURIAL OCCUPATIONS, in which "the practitioner organizes, operates, and assumes the risk for his own work, either alone or in partnership with colleagues. He offers direct service to his clients as they need it. The professionalizing groups in which this pattern is dominant include accounting, architecture, dentistry, law, medicine, and optometry."
>
> THE COLLECTIVE OCCUPATIONS, in which "the practitioner performs his service in an institution that has employed him. Sometimes his clients are the members of an association, as is true with most Protestant and Jewish ministries. Sometimes his clients are members of the general public or of some special public. Among the professionalizing occupations predominantly using this latter form of service are engineering, forestry, journalism, librarianship, nursing, pharmacy, social work, and teaching. The practitioners who follow this pattern sometimes work alone, but more often they are associated with a group of colleagues in either their own vocation or in others allied to it."

> THE HIERARCHICAL OCCUPATIONS, in which "the practitioners also work within an institutional framework but their expertise lies not in giving of direct service but in their capacity to operate an ordered structure of authority and to initiate or to enforce the policies that best foster and maintain this structure. Among the professionalizing groups that characteristically follow this pattern are the armed forces (air force, army, coast guard, marines, navy) business administration, and the Roman Catholic clergy. In some of these cases -- most notably the armed services and the Roman Catholic clergy -- there is, for practical purposes, only one employer. If the practitioner leaves the employ of the sole possible user of his services, he leaves the profession. In other cases, alternative employers exist and the individual often gains advancement by moving from one to another.

Using this classification presented by Houle, it becomes clear that the independence of action is the greatest in the entrepreneurial group and is present in varying degrees in the other two classifications. The expertise of the individual professional gives him a quality that distinguishes him from others employed in the same institution.

The knowledge of these basic patterns has implications for the development of continuing education programs. Not only do they make the task of comparison much more difficult, but the educational practices used are influenced by these basic differences in patterns. The educator concerned with continuing education cannot make his greatest contribution unless he understands the nature of the work environment of the professional group that he is serving.

A prototype that is particularly relevant because of its underlying philosophy, is "Lifetime Learning for Physicians: Principles, Practices, Proposals," which was authored by the Study Director of the Joint Study in Continuing Medical Education, and appeared in the Journal of Medical Education of June 1962. Its purpose is to "CREATE A NATIONWIDE UNIVERSITY WITHOUT WALLS FOR CONTINUING MEDICAL EDUCATION." (Dryer, 1962, p. 89) Its emphasis throughout is focus on the patient, through the physician -- a mission parallel to that of the present study.

> Goals are improved patient care and health maintenance, and enrichment of medical careers. Goals will be achieved -- insofar as the doctor-patient and doctor-community relationship can contribute to them -- by maintaining lifelong competence of physicians and by increasing 'health competence' [underlining added] of patients. (Dryer, 1962),p. 89)

Other key emphases in the Dryer proposal are the elimination of local inadequacies by means of the new technology and new education patterns. The continuing education program envisioned would be "an organized, sequential curriculum, comprehensive in scope," which is continuously available. An evaluation element is built into the program both for the physician-learner and the educator; a variety of voluntary examinations are designed primarily as part of the learning procedure. A physician has the choice of electing to take examinations; taking examinations for self-appraisal purposes and remaining anonymous; or taking examinations and receiving credit for passing if he so desires. The plan envisages the development of "core curricula" for each specialty area, comprehensive in coverage to meet patient needs.

Throughout the book, and on nearly every page, is emphasis on the fact that the problems faced by those who want to continue their education are nationwide, and would benefit from a national plan which articulates or reinforces existing personal, community, regional, and national education resources. "Organizing a nationwide coordinating structure is described as parallel with the task of fundamental re-examination of our ideas about the nature of education." (Dryer, 1962, p. 93) Because medicine is an entrepreneurial occupation, many essentials that would be called for in a plan for library personnel in an institutionalized setting are not covered, such as levels of employees. Also, although a national structure is called for in the Dryer proposal, details of the structure are not described, except to say that implementation of the plan would be conceived, planned, designed, built, and staffed much as a new medical school would come into being. This document is "must" reading for anyone designing a nationwide plan for continuing education.

In an interview in Chicago with three members of the staff of the Department of Continuing Medical Education of the American Medical Association, two members of the Project team asked about the implementation of the plan. It was explained that the plan had been voted down in favor of another project that required less funding at the time, but that many thought that it was a great mistake not to have carried through with the plan outlined by Dryer and the Joint Committee that worked with him from other related medical associations. The further comment was made that the American Medical Association had carried through on many of the suggestions made in the plan. In sum, the feeling was that although the Dryer plan was not accepted at the time it was proposed, this did not diminish the fact that it was an outstanding conceptual presentation; and had it been followed, continuing medical education would probably have been greatly strengthened.

One prototype organization that works cooperatively with many local, state, regional and national groups is the National Center of Educational Media and Materials for the Handicapped (NCEMMH). The scope of activities of this Center is in many ways parallel to the types of activities that a nationwide system of continuing education would encompass. The work scope covers: (1) the development of instructional materials; (2) the development of competencies of the professionals who work with handicapped persons so that the materials can be used optimally; (3) the conveying of information about materials, processes, and resource persons to those persons who work with handicapped learners; and (4) the arranging of means to deliver the materials to the users who need them (Belland, 1973, p. 8). Two features of NCEMMH deserve special attention. One is the development of an evaluation process featuring a specially designed process evaluation form and a "Media Selection Conference" to determine which materials the National Center will continue to work with and disseminate (NCEMMH, 1973). The other is the development of a "Needs Analysis Methodology" for the purpose of providing data for decision making (Weinthaler, 1973).

A third prototype that deserves careful study is the Education Commission of the States (ECS), a partnership that has been created by the states for the advancement of education. The creation of the Commission provides each state with a source of trained talent to help explore policy alternatives, a clearinghouse for educational information, a national forum for the interchange of ideas, and a liaison between political, educational, and federal organizations. This prototype is signifcant because it combines the idea of an assembly of ECS State Commissioners with the idea of a representative Steering Committee. This Commission is particularly interesting because it helps the states to take advantage of the unprecedented opportunity to re-assert their influence in the management of educational affairs (Education Commission of the States, 1973). A feature of special interest is the use of a "Compact for Education." This compact must be passed in an identical form by every state which joins the Commission. At present, the flags of 46 member states and territories are flying in the Denver headquarters of the ECS.

A fourth prototype which contains possible structural ideas for the design of a national plan is the National Legislative Network for Libraries of the American Library Association (ALA, Legislative Committee, 1973). The Network is organized on the basis of fifty states and the District of Columbia. Each state has a standing committee on legislation; the heads of each state library agency and the school library coordinator for each state are members of, or meet with, the legislative committee. These state legislative committees could be easily tied in to any nationwide plan.

A fifth prototype that presents many parallels in terms of processes, is the Technology Information Exchange (Hoy, 1973), a part of Public Technology, Inc., a research and development organization, servicing the Council of State Governments, the International City Management Association, the National Association of Counties, the National Governor's Conference, the National League of Cities, and the U.S. Conference of Mayors. The purpose of the Exchange is to encourage the exchange of innovative technology among city, county, and state governments or between these governments and private enterprise, federal agencies, universities, foundations, and associations. The four basic activities carried on by the Exchange are problem description, information acquisition, product assembly, and technology dissemination. The Exchange is funded during its first three years by the Office of Intergovernmental Science and Research Utilization of the National Science Foundation. During this time it will gradually shift its financial policy to one which depends on the sale of product services, membership subscription sales, and project contracts or grants. Its long-range financial policy is to solicit dollar resources from state and local governments, federal government agencies, and private sector foundations.

APPLICABLE CONCEPTS FROM OTHER MODELS

In addition to these five prototypes, which in their structural organization and services provide suggestions of how a nationwide system for continuing library and information science education might be designed, there are many examples of models that point out important concepts regarding individuals and the way they are motivated to further their own continuing education, and the role of the educator in solving the problems of continuing education. A few of these models that seem particularly helpful in their concepts are noted.

Nattress (1970b), in developing his model of the process of continuing education, emphasizes the fact that continuing education should be goal-oriented rather than activity-oriented; that is, the objectives should be stated clearly in behavioral terms before any activity is planned. The activity should be appropriate to its objectives. Nattress asserts that the role of the educator must be more than that of an educational agent or a facilitator of learning prescribed subject matter. The educator must be willing and able to interact with the student in each segment of the model. For example, the educator must be sensitive to pressures and tensions within and between individuals in order to help them set reasonable short- and long-range objectives. This, in fact, may be viewed as a valuable role model for library and information science educators.

Knox (1973, p.5) builds his model for life-long, self-directed learning on the theory that "an approach to continuing education that relies heavily on the individual to guide his own learning activities is vulnerable to nearsightedness." Busy practitioners are so involved in daily problems that they lose a broad perspective, fail to take time to study, and are less apt to become familiar with new knowledge than are associations, universities, or service institutions.

To facilitate the efforts of individuals in their efforts in continuing education, Knox advocates Linkage Agents at the local and regional levels who help the practitioner become aware of and use the resources for continuing education that are available. Because the Linkage Agents work with individual practitioners, Knox (1973, p. 9) envisions their trying to accomplish three objectives:

> One is to use precept and example to help professionals develop a more complete understanding of the importance and methods of life long self-directed education. A second is to encourage and assist professionals to become more self directed in their continuing education. A third is to develop procedures and aids that will increase the accessibility of learning resources for professionals who want to assume the primary responsibility for their continuing education.

The role of the Linkage Agent can be performed by a wide range of individuals, in various positions institutionally, such as staff members in state or regional continuing education programs, university faculty members, administrators engaged in continuing education in various associations, staff members of state departments concerned with continuing education in various specialized areas, or officers in professional associations. However, it does take certain qualities in those individuals.

Malcolm Knowles, in an interview with two members of the Project team, emphasized the importance of considering, in any nationwide planning, a model which is now gaining wide acceptance within the professions generally -- the competency-based model. The basic idea is to develop a competency model for specific roles within a profession, and to develop a basic core of competencies that are needed by all roles. Knowles emphasized that there is widespread mistrust, or resistance to continuing education efforts that are imposed on people. This new type of model is different. It is voluntary, and it involves a process in which the learners are directly involved in deciding what they should learn. The needs of practitioners are identified simply by asking them. There are wide variations in the application of competency-based theories of determining what should be studied in continuing education and how it should be done.

One interesting project is that of Hanberry (1973) at the University of Maryland, which involves a futuristic approach to planning and developing adult and continuing education systems through the use of regional and national think tanks. A systematic method has been designed to assure a good cross section of participants from a wide array of disciplines and professions, and by public officials as well as students. Hanberry has devised a process of looking into the future to focus on what competencies people will need five, ten, and twenty years from now, and what is needed to tool up for these competencies.

Many of the health science professions have developed a high degree of proficiency in the area of competency-based learning and in the development of self-assessment processes. The American Medical Association, for example, in cooperation with the University of Illinois Center for Educational Development, has established a self-assessment resource center with the objective of designing numerous prototypes that should be considered in designing a system of continuing medical education with self-assessment (S/A). The project includes the development of effective methods for determining priorities and selecting topics relevant to present-day medical practice; the development of exemplary self-assessment instruments; the development of feedback systems to those involved in programs of continuing education; and the evaluation of the designed self-assessment instruments. Designed self-assessment instruments have taken the form of written simulations (authored by physicians in workshop sessions); three-dimensional simulations (in which physical models are used); and computer simulations. In addition to the development of software, the project staff is exploring alternate media and equipment for presenting problems to practicing physicians more efficiently and effectively (American Medical Association, 1973). The American Medical Association has built a large reference library just on self-assessment as it is being used in many professions and disciplines. The Project team was told that those having responsibility for building a nationwide plan for continuing library and information science education would have welcome access to this reference library.

Simply, the self-assessment system works like this: The physician writes in to the center; he receives a package of test materials. In this test he is given information about a patient, and is asked to make a diagnosis. He sends his results back to the center, where a computer evaluates the test, and later is able to report back on what the doctor needs to bone up on. A prescription is given to the doctor, consisting of references, reading lists, workshops he can attend, or resource people in the area he can go and talk to.

Efforts similar to those of the American Medical Association are being used by many other professions. Cutting across professional lines is the Educational Testing Service (ETS), which is in the process of developing competency models for various groups within professions. In addition, at their new educational center in Princeton, the Educational Testing Service is holding intensive seminars for leaders of continuing education (Educational Testing Service, 1973).

In spite of the wide experimentation and vast amount of literature on the use of competency-based learning, the Project team found in interviews and in presentations at group meetings that there is a lack of understanding of the term as used in the professions today and consequently a hestitancy to accept the concept. Therefore, it was suggested by the members of the Project's Advisory Board that an explanation of the concept be included in this report.

A check in the dictionary will yield no definition for "competency-based" as it is a term of recent origin which has emerged from the current emphasis on (1) specific objectives made clear for the learner and teacher alike; (2) individualization of learning; and (3) accountability. As defined by Houston and Howsam (1972, pp. 3-4), the term has the following connotations:

> ... The word competency has been chosen to indicate an emphasis on the "ability to do," in contrast to the more traditional emphasis on the "ability to demonstrate knowledge." The term competency-based has become a special designation for an educational approach, for a movement. The term cannot be defined in a simple phrase; its meaning emerges from the complex of characteristics of this educational mode....
>
> Two characteristics are essential to the concept of competency-based instruction. First, precise learning objectives -- defined in behavioral and assessable terms -- must be known to learner and teacher alike.... Both learner and teacher are fully aware of the expectations and of the criteria for completing the learning effort. From a variety of alternative learning activities, those most appropriate to the specific objectives are selected and pursued. Neither teacher nor learner is permitted to view the activities as the objective of the learning experience.
>
> The second essential characteristic is accountability. The learner knows that he is expected to demonstrate the specified competencies to the required level and in the agreed-upon manner. He accepts responsibility and expects to be held accountable for meeting the established criteria. ...
>
> ...Competency-based programs characteristically are individualized; they are self-paced, and thus time is a variable. They are personalized as well; each student has some choice in the selection of objectives and of learning

activities. Individualization does not imply that all instruction is oriented toward independent activities. Group and even mass instructional processes are viable alternatives; in some cases, they may be the most effective and efficient options.

Overall, the result of competency-based education is that the emphasis shifts from the teacher and the teaching process to the learner and the learning process. The focus is always on the needs and accomplishments of the student.

In addition to these characteristics of competency-based education, there are a number of concepts and procedures that enable this type of education to be more effective. Three of these concepts which are generally used to implement competency-based education are of particular importance.

The first is the use of the new technology and the development of delivery systems so that: (1) learning can be individualized; and (2) access to learning opportunity can be broadened. The second enabler is the use of a systems approach to deal with the complex problems that competency-based education involves, including the provision for feedback, and the consideration of options (including those available in an individualized instructional system). The third concept is the use of learning modules. A typical learning module "includes a set of activities intended to facilitate the learner's achievement of a specific objective or set of objectives. It is relatively self-contained unit, designed for a specific purpose, and is a part of a broader, more comprehensive instructional system." (Houston and Howsam, 1972, p. 10). Modules take different formats, but according to Houston and Howsam, most have five parts: (1) the rationale and the importance of the objectives to be achieved; (2) the objectives stated in criterion-referenced terms, indicating what is necessary for successful completion of the module; (3) a pre-assessment test of the learner's competence which evaluates his present competence in meeting the objectives of the module; (4) the enabling activities which are procedures for attaining the competence stated in the objectives of the module; (5) the post-assessment, which also measures the competency of the individual for meeting the objectives of the module. Successful completion of the post-assessment signals successful completion of the module. Modules characteristically include means by which the individual is kept informed throughout of his or her performance and progress.

In the Carnegie report on higher education for the professions, Schein (1972, pp. 129-131) designates the development of new kinds of learning modules, built on better theories of how adults learn, as one of the four major changes that are needed to improve professional education. Schein specifies five characteristics that these modules should have: (1) flexibility to accomodate students of different learning styles; (2) integration of knowledge and skill elements; (3) costs that are less than traditional courses; (4) increase in the amount learned by students; and (5) encouragement of students "to learn how to learn." He further specifies that the modules developed by the professional schools should be flexible enough to "facilitate the continuing education of alumni of the school at varying periods following graduation and as career switches may be desired." (Schein, 1972, pp. 130-131). He sees one of the great advantages in the development of modules is that it permits preparation for a variety of career paths because various learning modules aimed at specific competencies can be put together in a variety of ways to meet a given individual's needs. He believes the use of modules will only be effective if there is an integration and choice of learning methods incorporated in each and if there is also an integration of the use of various kinds of resources (Schein, 1972, pp. 132-134).

The needs relative to competency-based education in continuing education are: (1) identification for the total profession, using a systems approach, of the specific competencies the practitioner needs to acquire or develop to a greater extent, in order to perform effectively in his or her job now and in the future; (2) development of learning modules that will enable the learner to achieve the desired competencies identified; and (3) development of self-assessment instruments to determine if performance at the desired level has been achieved;and (4) provision of feedback that will lead to continuous improvement of the total system and its essential elements.

The C.W. Stone study, Needs for Improvement of Professional Education in Library and Information Science (1973, p. 7) states the first of these objectives in this way:

> ...What should be encouraged, therefore, is the launching profession-wide of a library (and information)science curriculum design effort which will proceed from detailed specification of competencies needed to perform satisfactorily in both present and prospective library and information service positions in light of such hard data as can be gained from manpower studies or which can reasonably be hypothesized. Necessarily, such an effort may have to take on the proportions of a major project which in some ways could resemble the work done several years ago in creating for secondary education the new "physics", new "math", new "chemistry" and the fruits of BSCS (i.e. the Biological Sciences Curriculum Study).

There are a variety of ways for accomplishing this objective. One way is discussed in Chapter 3 under the heading "Needs Assessment Through the Concept of Competency-Based Learning." The advantages of this way of proceeding are threefold:

(1) it involves a large number of people starting at the grassroots level; (2) it is relatively economical to carry out; (3) it can be started at once.

Another way would be to take the data already collected from the field and reported in task analysis studies and manpower studies within the profession and arrive at a fairly accurate picture of competencies needed by library personnel now and five years from now. This was suggested by C.W. Stone (1973, p. 7) and expressed to the Project team Advisory Board by Don Ely, Director of the Center for Study and Information at Syracuse University. For example, the American Association of School Librarians' School Library Personnel Task Analysis (1969) analyzed the tasks performed for the various positions in the school media center and translated these into competencies needed. Similarly, the Kortendick and Stone study (1971, pp. 107-109) determined in great detail 223 major job activities performed by librarians (administrators and non-administrators), assigned them a joint time and importance score and ranked all of these. (The results of these analyses showed that the activity that far outranked any other both for time and importance was "Directly supervising and guiding subordinates.")

This study also asked the respondents to indicate those activities in which they felt they had the most competence and those in which they felt they had the least. The reasons given for greatest and least competence were also solicited -- the main reason for lack of competence was lack of training (Kortendick and Stone, E., 1973, 121-24).

In addition to gaining information on competencies needed as perceived by the library respondents to the questionnaire, top level administrators were asked, from the point of view of the employing library, which competencies they felt were necessary to perform more efficiently (over and above those achieved at the Master's level)[1], and what courses they felt were most needed in order to provide the competencies needed (Kortendick and Stone, E., 1971, pp. 223-245). Also discovered, in addition to the inventory and determination of competencies needed were the courses respondents felt were needed most in order to acquire the necessary job competencies for their present positions.

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[1] In rank order the competencies most needed at the post-Masters level for library personnel, as listed by library administrators interviewed were: (1) capacity for directing others -- including interpersonal skills and employee motivation; (2) communication skills; (3) understanding the management process; (4) skill in decision-making; (5) skill in program planning and budgeting; (6) developing and merchandising user services, including public relations and publicity; (7) innovation -- taking the lead in bringing about changes; (8) gaining an understanding of systems design and analysis, including the understanding of networks (Kortendick and Stone, 1969, pp. 226-236). In addition the interviewees expressed the opinion that every library would be involved directly or indirectly with automation in the next decade and that every librarian needs to have an understanding of how

In terms of providing for competency-based education, the study would be of more value had the respondents been asked to indicate the specific competencies needed rather than to relate these to some 95 course offerings. If this had been done, rather than developing model packaged courses (which was the ultimate outcome of the research), modules could have been developed which could be provided to meet specific competencies and which could have been grouped together to meet specific continuing education needs of individual practitioners.

Another study that will undoubtedly yield information about competencies needed now and in the future is the Department of Labor's study on librarianship which is scheduled for publication in the summer of 1974.

C.W. Stone, in his 1973 study, also gives a "tentative mapping of priority concerns" which he believes could serve as a helpful guide for education for competency. In addition, a number of library schools such as Indiana University and The Catholic University of America have conducted studies of their alumni relative to competencies needed now and in the future, as a part of the current self-study efforts relative to re-accreditation under the new 1972 standards of the American Library Association.

These are a few examples of studies that could yield an initial guide -- a starting data base -- for the development of competency-based continuing library education.

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the computer can help both in improving library procedures and in increasing the speed and accuracy with which data can be supplied to the user. The conclusion was that for all those librarians who did not have this type of learning experience at the Master's level it was a continuing education necessity (Kortendick and Stone, 1969, pp. 236-237). The interviewees were also in general agreement on the type of competencies that were most needed at post-Master's level in automation. In rank order these were: (1) mastery of terminology in the field of automation; (2) awareness of the potential applications of automation in the individual's particular library; (3) the necessity of putting automatic data processing operations in perspective with regard to the cost effectiveness; (4) ability to relate hardware to software (to understand, for example what hardware will produce services needed by a specific library on a cost effective basis); and (5) the capability of seeing the potential in new developments, such as satellite technology (Kortendick and Stone, 1969, pp. 238-241).

The advantage of such an approach is that it would be possible to make better use of these and other research studies which have already cost thousands of dollars, yet have not been utilized to their best advantage by the field. The disadvantage is that because conditions are constantly changing, a composite analysis of findings would have to be undertaken immediately so that these research efforts might reflect an accurate picture of present needs. Also, processes involving continuous analysis of need and adaptation of findings pertaining to future competencies would have to be instituted immediately.

Still a third approach is one that is being used by the Medical Library Association. This Association is seeking the help of the Educational Testing Service which is currently helping the Association work toward the development of competency models for various library personnel roles in the field of medical librarianship. The advantages of this approach are that the Educational Testing Service has available highly skilled technologists who have had years of experience in developing similar models for other professional groups as well as the expertise necessary to develop instruments for evaluating the success of programs, in relation to established objectives.

A fourth approach is that competency-based continuing education be considered as one element to be identified and systematically studied as part of a total system of continuing library and information science education. Effective planners of systems identify multiple targets for their efforts and ensure that these targets are interrelated in systematic terms. Such a systematic effort includes: (1) organizational and communication structures within which continuing library and information science education programs operate (including state agencies, professional associations, college and university continuing education programs, employing libraries); (2) persons concerned with continuing library and information science education -- their attitudes, perspectives, values, and behavior systems; (3) the curricula studied by prospective and practicing library personnel; and (4) the continuing education participants themselves as students. These elements cannot be treated effectively in isolation during a process of development of a nationwide system of continuing education. This approach would not preclude the use of the three previous approaches suggested, or approaches that specific groups might wish to take in accordance with their perceptions and their interests, but it would mean that these approaches would be planned through a cooperative consortia in which all elements would have a voice in the planning and all elements would be aware of what was being carried out by other groups and how each group's research and accomplishments would fit into the total system.

Competency-based learning is designed to carry the individual beyond knowledge and to effect his or her performance. The issue is what the individual does; the focus is on performance. Closely related to competency-based learning is the concept of self-assessment; thus competency-based learning and self-assessment are typically discussed together in professional literature.

Currently over 20 professional organizations are either engaged in or planning some self-testing programs for their respective memberships; however, according to Campbell (1972, p. 23), many of these are directed toward the assessment of knowledge or the ability to recall specific items of information. Campbell advocates the use of self-assessment as a means whereby the practitioner can diagnose his or her own performance deficiencies and thereby determine his or her own educational needs. This is the thrust of the work started at the Center for Educational Development at the University of Illinois, in cooperation with the Illinois State Medical Society, and with the support of the Illinois Regional Medical program, started in May of 1972 (Campbell, 1972, p. 23). By means of different types of simulations, physicians are presented with problems to be solved; at the conclusion of the experience, each participant receives a copy of his own responses and is given a feedback package which details the optimal responses.

> ...In this way the participant could make a personal judgment about his educational needs in the clinical areas covered by the self-assessment examination. In addition to this, group data collected from such activities could enable continuing education planners to develop programs designed to meet identified practitioner needs. With such data as a baseline, a means would be afforded whereby they could determine if the programs they offered influenced the subsequent performance of their participants. (Campbell, 1972, pp. 24-25)

A directory of 21 self-assessment programs of 15 different medical associations has been compiled by the Department of Continuing Medical Education, a division of Medical Education of the American Medical Association. All of these programs furnish the participants with a bibliography and references in areas in which the participant has missed questions or wants further information.

In summary, self-assessment complements continuing education. It is self-initiated and helps the practitioner to pinpoint educational needs. It is relevant to what the individual needs and wants to know and it encourages self-study. It is intended as a learning experience and the important feature is what the learner actually accomplishes. It does have the potential of becoming a building block in a system of continuing education that begins with each individual's diagnosis of his own need (self-evaluation), followed by instruction. Thus feedback goes directly to the individual so that it can be used in any way that will help increase competency.

It should be emphasized in closing this discussion of competency-based continuing education and self-assessment that to be effective, planning has to be done in systematic terms, dealing simultaneously with elements that comprise the total system,which includes objectives, programs, evaluation (including self-assessment programs), feedback, and adaptive response.

A movement toward competency-based education can best be actualized through collaboration of all relevant groups and concerned individuals. As pointed out by Houston and Howam (1972, p. 13) rigidity of perception, policy, and rules of component groups can block collective action.

> ... At such times, a vehicle is needed with capacity to move people outside their own perceptual frameworks, so that they can view the situation from the perspective of others.
>
> The consortium is such a vehicle. It contains representatives of all element organizations. If there is a genuine desire for and commitment to action on the part of the different elements, a consortium can produce flexibility of view, commonality of viewpoints, and mutual commitment to action. Given the complexities of modern instiutional life, such consortia are necessary for progress.

Thus in the framework of this report, the position is taken that no widespread changes, whether they be toward competency-based education and self-assessment in continuing education, or other means of improving the quality and quantity of continuing library and information science education, can be accomplished effectively for the whole profession unless planning is done at a nationwide level involving all of the element groups. Focus on a single part of the profession's continuing education system by a single group can lead only to minor and superficial change, for each part is constrained by its relations with other parts of the system.

APPLICABLE CONCEPTS FROM OTHER PROFESSIONS AND DISCIPLINES

From the individual professions and disciplines, such a host of materials containing elements relevant to building a nationwide plan for continuing library and information science education are available that it is difficult to single out only a few of particular merit. The following, however, certainly have many concepts worthy of study.

Engineering

In engineering, (as pointed out in the beginning of this section as another "collective" profession, like librarianship), the National Science Foundation funded study offers suggestions of roles for employers, associations, and individuals, and stresses throughout the importance of the employer-university interface. Its concluding summary of recommendations (Continuing Education for R & D Careers, 1969, pp. 185-198 contains a wealth of suggestions that should be considered in the development of any nationwide plan of continuing education.

Models that might be emulated for the profession as a whole are two studies for the American Society for Engineering Education (ASEE). One is the landmark "Goals of Engineering Education" (ASEE, 1968) for the whole engineering profession, which looks to future educational needs and includes goals for continuing education. The second is the recent "Final Report: Engineering Technology Education Study" (ASEE 1972), which includes in its recommendations suggestions for the continuing education of technologists and technicians, and takes a firm stand to the effect that these employees need continuing education as much as professionals. Of particular interest is "An Employment Guidelines Checklist for the Engineer Job Applicant" (Wright, 1973), developed by the National Society of Professional Engineers (NSPE) Economic & Liaison Activities and major employers. This statement is given to every graduate of an engineering school. Prospective employees can examine this form and decide if the company to which they are applying is offering conditions of work that are acceptable. A principal section of that statement is provision of continuing education time and funds.

Architecture

The innovative program developed over the last three years by the American Institute of Architects (AIA) is a demonstration of what can be done nationally within one professional organization with a qualified director of continuing education and with a minimum budget. All products are produced on the basis of user surveys. After a one year period, in which $8,000 was budgeted by AIA, the continuing education products have become self-sustaining financially. Products are divided into a behavioral division and an information division. Those in the behavioral division deal with skills, how to do things, and "process -- verb-oriented and action-oriented activities." The information division deals with the kinds of things that an architect needs to know to carry on his work. The information division features monthly reviews of relevant literature on cassettes, computerized reference service taking inventory at universities, associations, and other places of all the programs which have relevance for architects, and an Architectural Informational Dissemination Service (AIDS). The service keeps track of live programs (those that must be attended) and packaged courses that can be done in the home. Dr. Rose (1972), the director and developer of the continuing education program at AIA, attributes a large part of his success to the consistent use of market surveys to determine needs, professional expertise used in the production of all products and services, a smooth delivery system, feedback, and built-in systematic evaluation of all products.

Banking

The longest on-going continuing education program of national dimensions sponsored by one association is that of the American Institute of Bankers (AIB), a division of the American Banking Association. In an interview with Dr. Cavalier, Director of Continuing Education for the Institute, the Project team learned that there are about 240,000 bankers who are members of the Institute, or roughtly 25 percent of the total bank population of just over a million. At the national offices for AIB's continuing education program, there are 40 staff people employed.

Dr. Cavalier attributes a great deal of the success of AIB over its 75 year history to its elaborate organizational structure. Each year it enrolls about 120,000 bankers in courses which are conducted in 375 chapters all over the United States. In addition, there are over 200 "study groups." According to Dr. Cavalier, every community in the land, regardless of size or density, has some form of AIB study group. The local chapters and the study groups are the major instruments of continuing education. In addition, the AIB conducts a successful correspondence program which reaches about 2,000 new enrollees each year.

One of the unique features of the AIB programming, and one that bears careful study as a model, is that all the programs at each level and in all geographic areas are conducted on a volunteer basis by the bankers themselves. Each chapter has its own organization with elected officers. The total structure is voluntary; it is the volunteer effort that makes the whole continuing education effort work.

Also, there is a local structure to support all the continuing education work. The elected chapter officers who carry out the program are competitive with each other, so that those who wish to aspire to offices are usually around the chapter as students and then as teachers and become well known. At the national level, there is an Executive Council to which any local member may aspire as an officer. The system is nationally divided into 12 population-based districts.

Some of the special features that Dr. Cavalier feels contribute to the stellar success of the whole system (in addition to the organizational structure), are an unusually well developed evaluation system for every course offered based on the "Instructor Performance Inventory" (Cavalier, 1972); high quality, attractively designed study materials developed by the national office; frequently published guides on "How to be a Better Teacher" issued to the volunteer leaders by the national office; and the emphasis throughout on recognition for those who participate. In addition to an elaborately worked out certificate program for various units of credits (established nationally) and the honor that comes from serving as teacher or leader of a local group, there are massive special events held each year to honor those participating in AIB programs, paid for entirely by the employing banks. One of the Project team was invited to two of these dinners, at both of which there were nearly 1,000 students being honored, just in the Washington, D.C. area. Tuition for individual courses ranges from $10 to $50 per semester; in practically every instance, full tuition is paid by the bank where the participant is employed.

Education

The Division of Instruction and Professional Development of the National Education Association has changed its concepts of continuing education radically in the last few years. The emphasis is on learning functions rather than teaching processes, and there is an increased emphasis on competency rather than on serving time or meeting requirements. These changes have been taken on at an accelerated pace because of forces in society which are demanding accountability (Luke, 1972).

Two recent developments are of particular interest. First, unlike any other professional group, teachers will not have their dues used for inservice professional development, but will instead put pressure on boards of education and colleges of education to provide some kind of continuing education that is relevant. NEA is helping teachers to negotiate for inservice education programs that are useful and effective (Luke, 1972).

Second, NEA is working to develop teacher renewal centers. The basic idea of a teacher renewal center is an inservice educational development process, involving a wide range of learning experiences and always including systematic evaluation. One of the key issues of concern to NEA is the governance of the teacher renewal center -- that it be made up of teachers, and that they have available to them as authentic a needs assessment program as possible. Edelfelt (1972, p. 24) outlines the types of guidelines that should be provided for a renewal center. Of special interest to any national plan is guideline one:

> The staff should include everyone from teacher aide to senior professor, and governance of the center should be the right and responsibility of those who use it.

The idea of the renewal center is closely related to the concept of differentiation of teaching roles, a concept that is rapidly gaining acceptance. This concept is adequately covered in The Teacher and his Staff (National Education Association, 1969), and Remaking the World of the Career Teacher (National Education Association, 1966). Edelfelt (1969, p. 2) argues:

> It is time to reorganize schools and to differentiate staff roles so that personnel can be deployed in ways which will make optimum use of interests, abilities, and commitments and afford teachers greater control over their own professional interests. And it is time to establish a variety of categories of teaching personnel, with career or senior teachers as the leadership corps of the teaching segment of the profession.

Jordan (1969, p. 27) argues that the conversion to differentiated teaching roles will produce great gains for continuing professional development. Continuing education for all personnel will become a part of the school's regular operation, probably in collaboration with institutions of higher learning.

These trends have implications for the development of a nationwide plan and would seem to hold potential for consideration. Consideration in the design of the national plan should be given to:

1. The differentiated professional role concept, which has implications for libraries of all types, not just school media centers, (as evidenced by Booz, Allen, and Hamilton (1972) study of the organization and staffing of the libraries of Columbia University), and has implications for the type of preservice as well as continuing education programs

2. The increased emphasis on competencies, which calls for a re-examination of the type of continuing education programming offered throughout the profession

3. The question of whether dues of professional associations should be used to support professional development activities, or whether association funds should be used by staff members of associations to play a consultative role in helping other responsible groups (such as a nationwide system) plan for continuing education programs and resources

4. The "teacher renewal center" concept, serving all levels of library and information service personnel

5. Promoting the concept that the costs of continuing education should be borne by the employing organization, not as a fringe benefit, but rather as a condition of employment

6. Having librarians become skilled in ways and means of showing accountability for the stewardship of resources assigned to them

These examples, and they are only examples, are taken from the literature and interviews with those in other professions and disciplines, and illustrate the wide range of experimentation and the global interest in continuing education today. From a study of the structure, programming, evaluation, and delivery systems of other plans, many elements can be found that may be applicable to a nationwide plan for continuing library and information science education.

NOTABLE BIBLIOGRAPHIC SOURCES

From many bibliographic sources, four deserve special mention. First is the Institute for Local Self-Government's design for action for education and training for the public service, entitled Continuing Continuing Education for the Public Service (Institute for Local Self-Government, 1971). Its 100 carefully selected annotated references and full appendices are crammed full of examples of innovative modes and methods of continuing education that have proved effective in the United States and abroad. Three other items containing elements of models which are sources for components to consider in designing a nationwide system of continuing library and information science education are Gould's Diversity by Design (1973); and two publications by Houle, The External Degree (1973) and The Design of Education (1972) which contains an extended bibliographic essay on adult and continuing education.

Before closing this section on a search for prototypes, it should be noted that there is a growing body of literature related to problems of knowledge utilization. A comprehensive knowledge base is being formed from applied research in such areas as anthropology, rural sociology, education, medicine, psychology, marketing, industrial research, military research, and space research. The work of three men is particularly relevant in this area: Ronald G. Havelock's Planning for Innovation Through Dissemination and Utilization of Knowledge (1969), which contains a comprehensive literature review of 3,391 multidisciplinary references; Everett M. Rogers' Communication of Innovations, A Cross-Cultural

Approach (1971), with 1,500 references chiefly on knowledge diffusion research; and Donald G. Marquis' Successful Industrial Innovations: A Study of the Factors Underlying Innovation in Selected Firms (1969). Just published by the National Institute of Education is Building Capacity for Renewal and Reform: An Initial Report on Knowledge Production and Utilization in Education (1973). Of particular value to those designing a national system is the chapter entitled "Building the Linkage and Support System" It proposes a rather comprehensive and interactive system which links together the producers and consumers of education knowledge and products, and also provides professional support to the operating system. The National Institute of Education proposes three initial program strategies designed to understand, improve, and strengthen such a system: an information dissemination strategy, a consumer information strategy, and a product delivery strategy.

POSSIBLE RESPONSIBILITIES FOR THE MEMBERS OF A NATIONWIDE PARTNERSHIP FOR CONTINUING LIBRARY AND INFORMATION SCIENCE EDUCATION AS IDENTIFIED BY PARTICIPANTS IN THE STUDY

Judging from the discussions and literature of the past few years, a consesnsus has emerged that there should be a distribution of responsibilities in continuing education. This is true in all professions and disciplines. Generally, the continuing education literature assumes that the individual carries the basic responsibility for his or her own life-long learning and continuing education. The employer has the responsibility of both providing opportunities for continuing education in the work environment and for ensuring a job structure that encourages employees to keep up to date. Professional societies and universities are expected to help individuals by providing educational opportunities and subject matter choices from which they can best select those things that best meet their needs. Employers and professional societies, as well as universities, have taken some share in the responsibility for making practitioners aware of their needs and helping them to plan to meet them. Ideally, responsibility for assessing quality service should be a community responsibility with abundant interface between the employer, the university, professional association, and other concerned groups.

In library science literature there are many examples (Stone, E., 1970; ALA, 1971, AALS, 1972; Martin, 1973; Warncke, 1973; Stone, E. 1974) which give recognition to a similar division of roles. Expression of such opinions in the literature is one way in which a consensus on issues like this is decided. It needs to be stressed, however, that expressing ideas in an abstract fashion does not necessarily reflect what is actually being done, nor does it always indicate important interfaces between component groups and how these interfaces affect the individual.

In an effort to get a reading on the current and potential responsibilities of the various groups concerned with continuing library and information science education, interviewees were asked:

> What do you feel should be the articulation between the relevant groups who are now playing a role in continuing education: the library schools, the employing libraries, the library associations, the state agencies, the individual librarians -- and any other groups that you feel should be concerned and involved?

Also, the last item in the questionnaire gave an opportunity for respondents to react to a similar question. The remaining part of this section attempts to summarize the responses received.

Groups rightfully need to self-select the responsibilities they wish to shoulder. Before presenting the list it should be pointed out that each of these groups has its own special relationship to the individuals seeking to learn; its own style of leadership; its own specialized capabilities; its own motivations in continuing education; and its own points of view concerning the manner in which it should support continuing education. The suggestions of the respondents serve to demonstrate the diverse ways in which a group might choose to facilitate the individual seeking to continuing his life-long learning. Perhaps even more importantly, these suggestions help build an initial foundation from which to proceed, remembering always that groups need to assume and negotiate their areas of responsibility.

THE INDIVIDUAL LIBRARY AND INFORMATION SCIENCE EMPLOYEES

Possible responsibilities for individual library and information science employees include:

1. Accepting basic responsibility for self-development
2. Recognizing their own needs for learning and identifying competencies needed to enable them to respond to technological and societal change
3. Determining their own goals, obtainable through continuing education
4. Evaluating continuing education programs
5. Assisting, encouraging, and advancing continuing education for those supervised
6. Supplying the internal energy and drive necessary to motivate learning
7. Committing personal time and money to continuing education; planning to share some costs with employers
8. Committing time and energy to serve on continuing education committees and task force groups
9. Becoming involved in inter-professional continuing education planning in communities
10. Accepting a new image of education -- life-long education in which the learning process is continuous and unbroken

THE EMPLOYING LIBRARY

Possible responsibilites for the employing library include:

1. Considering continuing education as an integral and vital function of the organization with an active relationship to the goals, planning, and management of the library. This might, for example include the establishment of staff development committees to initiate, review, recommend action, create, and sustain enthusiasm for such actions as:
    a. suggesting priorities based on continuous assessment of needs
    b. encouraging supervisors to develop innovative and supportive approaches regarding continuing education opportunities
    c. demonstrating commitment through institutional recognition or reward systems
    d. coordinating continuing education goals with the goals of the library

2. Providing for employee-participation in decision-making

3. Evaluating and providing feedback of existing continuing education efforts to the sponsoring groups

4. Participating in informal cooperative programs sharing expenses with other libraries and co-sponsoring activities with other groups

5. Instituting an accurate record keeping system for continuing education activities

THE STATE LIBRARY AGENCY

Possible responsibilities for the state library agency include:

1. Coordinating continuing education programs on a state-wide basis involving practicing library and information science personnel, employing libraries, library associations, and library educators (involved with graduate, undergraduate, and community college technician programs)

2. Providing a link between individual libraries and nationwide and regional plans

3. Identifying priority continuing education needs of the state

4. Justifying continuing education for librarians to the state funding body so that adequate support for such activities can be secured

5. Providing role models by instituting sound internal training and staff development programs

6. Planning, implementing, and evaluating state-wide continuing education programs based on the identification of needs:

    a. Providing basic training in technical services
    b. Providing consultant services
    c. Promoting and publicizing regional and in-state opportunities
    d. Conducting institutes and seminars
    e. Experimenting with new training techniques, such as simulation
    f. Intensifying existing continuing education programs

7. Appointing at least one employee to be in charge of the coordination and promotion of continuing education and to serve as a Linking Agent

THE LIBRARY ASSOCIATIONS -- STATE, REGIONAL, AND NATIONAL

Possible responsibilities for the library association include:

1. Determining major continuing education needs within the profession

    a. Reviewing current status of continuing education programs, sponsored by the association
    b. Projecting future needs of the profession

2. Organizing and implementing continuing education programs to produce new skills and to disseminate new information

3. Encouraging members to participate in continuing education by disseminating information about continuing education to members

4. Identifying continuing education experts among the membership and and encouraging their use

5. Committing conference time and resources to continuing education

6. Establishing a continuing education committee within the association structure and appointing Linking-Agents and if finances permit, assigning at least one full-time staff person to be in charge of continuing education

7. Developing a closer relationship with employing libraries with regard to continuing education efforts

8. Considering ways of increasing the distribution of pre-prints and reprints of articles and papers published in the association journals and increasing the quality of association journals

9. Assisting in setting standards and guidelines for continuing education programs

LIBRARY SCHOOLS (graduate and undergraduate programs)

Possible responsibilities for library schools include:

1. Specializing in an area of continuing education
    - a. creating and funding faculty positions specializing in continuing education
    - b. conducting a survey of the local needs of library personnel
    - c. encouraging faculty to serve as resource persons, leaders, and consultants in their areas of specialization

2. Publicizing continuing education programs and products

3. Encouraging faculty participation in continuing education efforts
    - a. conducting research in areas related to continuing education, such as:
        - 1) standards that should be applied to continuing education programs, especially non-credit programs
        - 2) relative efficiency of different modes of continuing education, especially non-credit programs
        - 3) effectiveness of new instructional methods as they can be applied to continuing education, especially television, cable technology, programmed instruction

        4) factors involved in motivating librarians and information scientists to participate in continuing education
    b. allocating faculty time for local, regional, state, and national continuing education efforts
    c. encouraging faculty to set examples as continuing learners

4. Appointing a faculty member or administrator to be in charge of coordination continuing library and information science education programming with college- or university-wide continuing education efforts

5. Giving direct instruction in the values and techniques of continuing education to help the prospective professional learn what sources to consult and how to evaluate these sources

    a. encouraging interdisciplinary planning and implementing of continuing education programs
    b. keeping faculty informed about continuing education projects in other disciplines

6. Offering courses on timely continuing education topics, such as supervision and management in the mode of seminars, mini-courses, summer workshops, and tutorials either on campus or through extension courses

7. Offering competency-based continuing education programs

8. Altering students to their need for life-long education and their responsibilities for continuing their education

9. Encouraging interface among the library school, employing libraries, and library associations

10. Helping in the training of continuing education specialists

THE LIBRARY USER

Possible responsibilities for the library user are:

1. Providing evidence of the benefits of continuing education for library and information science personnel

2. Supporting the concept of continuing education for library and information science personnel

CONCLUSION

In conclusion, it should be strongly reemphasized that individuals and groups need to assume and negotiate their own areas of responsibility.

Although the question was asked about the articulation between groups concerned with library and information science continuing education, examination of the suggestions offered shows that the majority of responses deal with activities within each group. These activities are important, but there is need to experiment with and to know much more about processes by which employing libraries, universities, associations, state agencies, and the public (including other professional groups concerned with developing continuing education opportunities), can enter into, and maintain successful collaborative arrangements for continuing education.

Two statements from respondents that seem particularly relevant are quoted in the following:

> Continuing education must become an integral part of all library activity in all libraries; a way of life of all who work in libraries. It should not be viewed as an added component, apart from normal endeavor, an end in itself; something extra indulged in if there is time and money.
>
> This will require philosophic acceptance, understanding and commitment to action on the part of individuals who work in libraries, of administration and governance of libraries, of those who educate librarians, and of their professional organizations.

The next statement, from a library trustee, emphasizes the importance of interface with those outside the library and information science field.

> Continuing education must add to the state of the profession as well as the status of the practitioner. It must fill gaps that exist, then go on to anticipate possible gaps so they do not occur. . . .

> Certainly everyone listed in the questionnaire should be involved. Add to that, however, experts and/or schools of disciplines touching the library in any way--finances, government, community action, business administration, etc.
>
> From the entire non-library world, if we listen, will come ideas, techniques, even new dreams. We listen, or, better yet, we even go so far as to argue with the proponent in order to pin him down to his idea of specifics. . . Then we evaluate, take what seems to be germane at that time, but we do not discard as useless what we do not choose to take; we store it for future possible use.
>
> Out of a procedure such as this can come much to be incorporated into continuing education and out of the process of continuing education itself will come certain refinements.
>
> I guess you would diagram it as a "Q". Continuing education can't be just a circle, or an "O" within the profession. There must be an entrance from the outside, and the end result, of course, is to improve our rapport in every sense with the outside. The tail of the "Q" is our life line--ideas in, visibility out, as well as a better understanding of the entire discipline of librarianship.

Many of the suggestions made for component groups are being carried out effectively now, but isolated successful programs lack coordination and continuity and are often unrelated to established goals in individual libraries and in various states. This problem is nationwide, hence can benefit from a nationwide plan which articulates or reinforces existing personal, community, state, regional, and national resources.

SUMMARY OF THE VIEW FROM THE FIELD

This Chapter, in making a review of the literature and of the survey data collected in this study, has surveyed some issues that the Project team believes are important to take into account in the design and implementation of a nationwide system for library and information science continuing education.

The concept that emerges from the views expressed by the respondents in the study is that continuing education should be given a higher priority than it now has in the area of library and information science.

Based on responses to the questionnaire used in the study, a definition of continuing education was established which includes the following concepts: a notion of lifelong learning which prevents obsolescence and assumes that an individual carries the basic responsibility for his or her own development; updating; diversification to a new area within a field; involvement in activities beyond those considered necessary for entrance into the field; the 'refresher' objective (reviewing once familiar material); and the concept that continuing education should be provided to all levels of personnel -- professional and supportive.

Although the respondents thought continuing education should be available to all personnel, they indicated that a national network with limited financial and human resources should give priority attention to the needs of librarians with an MLS degree; second, to operating librarians without an MLS degree who were carrying professional responsibilites; and, third, to paraprofessionals. In long-range planning, the larger directive of providing these opportunities to all levels of personnel -- the librarian with an MLS degree, operating librarians without an MLS degree, technical information specialists, paraprofessionals, library technicians, clerks, and trustees -- must be implemented.

Major issues identified that need to be taken into consideration in the design of a nationwide plan for continuing education are: awareness of the forces for and against a national plan; use of a systems approach; basic assumptions about the adult learner, the learning program, and a continuing education system; the importance of using interdisciplinary approaches; motivational factors which encourage participation in continuing education activities, especially the personalized criteria that must be met for a national program to be accepted, such as means of providing recognition for continuing education activities.

The research accomplished noted that the outstanding characteristic of the current needs is their similarity among the several groups that make up library and information staffs, including the MLS librarians, the operating librarians, and the paraprofessionals. These needs ranked in order of priority are: (1) updating of professional knowledge; (2) management; (3) human relations; (4) technology;

and (5) non-print media. While the rank order of these needs shifts somewhat among the different categories of staff and the different types of libraries, they appear in all groups' assessments of needs. The chief variation from this pattern is for trustees, whose primary needs relate to understanding library goals, library functions, and library legislation.

The data also indicates that in addition to the priority needs, there exists a wide variety of content needs that can probably be met only by designing self-learning courses for individual study.

Questionnaire data also yielded information on different forms and techniques for the provision of continuing education. On the basis of the survey results and study team investigation, the most effective current modes are workshops, institutes, and participation in professional meetings. The least effective, as perceived by the respondents, are provision of materials for home study and correspondence courses. It was also noted that there is general widespread dissatisfaction with the methodologies that now characterize continuing education.

The findings of this investigation suggest that a number of design improvements be made in the area of modes and methods of continuing education. One example is the use of flexible modules developed by innovative leaders and teachers who are themselves continuing as learners and who serve as role models for the profession. They must be knowledgeable in learning theory and career counseling, and have both a respect for people and the ability to serve as leaders or members of a team.

In preparation for the design of a nationwide plan for continuing education, a search was made for continuing education prototypes in other professions and disciplines. While different professions have different patterns of work and what is most effective for one may not be effective for another, it is valuable to examine how other professions approach continuing education. The Project team examined a number of prototypes including: a lifetime learning plan for physicians; the National Center on Educational Media and Materials for the Handicapped; the Education Commission of the States; the National Legislative Network for Libraries of the American Library Association; and the Technology Information Exchange, a part of Public Technology, Inc.

In addition to these specific prototypes,the professions of engineering, architecture, banking, and education were among those examined to identify trends and concepts that have the most potential for application in the information field. These included: (1) the differentiated professional role concept; (2) the increased emphasis on specialized competencies; (3) the use of dues of professional associations for professional development activities or the use of association funds by staff members of associations to play a consultative role in helping other responsible groups (such as a nationwide system) plan for continuing education program resources; (4) the "teacher renewal center" concept; (5) promoting the concept that the costs of continuing education should be borne by the employing organization as a condition of employment; and (6) having librarians become skilled in ways and means of showing accountability for the stewardship of resources assigned to them.

From the interview data and the open-ended concluding question on the questionnaire survey, possible responsibilities for the members of a nationwide partnership for continuing library and information science education were identified by participants in the study. It is necessary to emphasize, however, that this list as presented reflects only what some individuals think. Groups rightfully need to self-select the responsibilities they wish to shoulder. The suggestions of the respondents do serve, however, to demonstrate some of the diverse ways in which a group might choose to facilitate the individual seeking to continue his life-long learning and indicate ways in which groups might participate in a partnership relationship in a nationwide plan for continuing library and information science education.

As background preparation for constituting a nationwide plan it is helpful to know what conditions are important if effort expended on continuing education activities is to be deemed successful by the profession at large. From his observations and experience, Shera (1972, p. 24) identifies 10 conditions under which continuing library and information science education has flourished and which, in many respects, parallel the points made in this Chapter. These conditions are:

1. in periods of crisis, change, and professional stress;
2. in formats which emphasize interdisciplinary approaches by those outside of librarianship -- "the degree of 'outside' participation offered";
3. in patterns which are cumulative, "each building upon and being more advanced than that which precedes it";
4. in programming that demands more than passive listening -- "ideally exercises, reports, even tests or examinations, should be required to give the participants a goal toward which to work and a sense of accomplishment when the program is ended";
5. in allocation of time for participants to talk informally with staff and other program participants;

6. in cooperative planning and implementation involving the libraries, the library schools, the state library and the state library associations ("with the state library in the strongest position to assume leadership");
7. in application of the system concept;
8. in demanding sacrifices on the part of all involved -- participants and the employing library;
9. in providing adequate financing; and
10. finally in recognizing that continuing education is an integrated whole, not a cluster of sporadic and isolated instances -- "the state library, the state library association, and the libraries of the state must stop playing around the edges of the problem."

Throughout professional continuing education literature, and reinforced by data collected in this survey, the assumption is made that the gap between knowledge and application grows wider each year. Several factors contribute to this gap: the maldistribution of opportunities--in quality and quantity--for sequential, participative continuing education by all levels of personnel; rapid advances in research; educational inadequacies even in those places where activities are taking place; patterns of organization and dissemination of knowledge which are not efficient in terms of individual needs.

In addition, the barrier of space, linked with variable local levels of quantity and quality, perpetuates the present maldistribution of opportunity for continuing library and information science education. The space barrier must be overcome. And it can be, for practical methods exist to meet individual requirements of library personnel to continue their education throughout their careers. Knowledge and tools from the combined fields of communication technology, instructional technology, the behavioral sciences, and library and information science are available, waiting to be used creatively.

A new balance needs to be designed among four articulated geographic levels--national, regional, state, and local--each of the four focusing its abilities, motivations and resources upon those tasks which it can best perform, but always seeking opportunities to interface with each other. A search of the literature was made looking for models demonstrating how such a balance might be achieved. No exact parallel could be found. Adapting components applicable to the situation in library and information science, and building on the data collected in the present study, a nationwide coordinating structure was designed. It is presented in the next chapter.

CHAPTER 3

THE CONTINUING LIBRARY EDUCATION NETWORK AND EXCHANGE (CLENE)-- A SERVICE AND RESOURCE FACILITY

This Chapter presents the model proposed in answer to the request of the National Commission on Libraries and Information Science for "recommendations for a nationwide program of continuing education for personnel in the library and information science fields."

UNDERLYING PHILOSOPHY

This plan proposes a service-oriented model for making equal access to continuing education opportunities available in sufficient quantity and quality over a sustained period of time in order to assure personnel and organizations the competency to deliver quality service and information.

Underlying the proposed model is a philosophy that library personnel should have equal access to opportunities for continuing education; that they do have personal and individual needs which can hopefully be extended through a nationwide network of continuing education programs; and that people -- not monolithic structures -- can best meet the needs of other people.

In order to sustain a truly service-oriented perspective, CLENE must focus on primary goals. First, it must concern itself with the development of processes that will encourage continuing education to become a priority concern and value throughout the library and information science field. Secondly, CLENE must encourage a broad multi-person involvement in every aspect of its existence.

As the proposed model was being developed, many precepts of the structure began to emerge. It seems appropriate to describe those boundaries of responsibility.

	CLENE should:	CLENE should NOT:
1.	Actively encourage widest participation possible of groups and all levels of library personnel in every aspect of CLENE. Participation at the grass-roots is vital	Be monolithic in its control

	CLENE should:	CLENE should NOT
2.	Involve people being served as well as those serving in decision-making	Look just to "leaders" or institutions of higher learning
3.	Establish flexible working relationship among participating bodies -- national, state, local, regional, individual	Build structures that are unable to adapt to changing conditions
4.	Provide for the continuing process of need assessment at grassroots level	Build programs on sporadic assessment of needs at national level
5.	Acquire, process, store, retrieve, and disseminate information about existing programs, resources, and services	Duplicate existing services
6.	Produce and disseminate material, resources, and programs to meet specific needs of individuals and groups applicable to identified high priority needs	Produce or mandate the use of material not directly related to need or demand
7.	Concern itself, through activities and policy statements, with the current issues impinging upon libraries and/or continuing education	Ignore current issues and problems
8.	Establish liaison with other professions for the purpose of promoting and exchanging continuing education ideas	Operate in isolation of continuing education advances in other fields

MISSIONS AND GOALS OF CLENE

MISSIONS

1. To provide equal access to continuing education opportunities available in sufficient quantity and quality over a substantial period of time to insure library and information science personnel and organizations the competency to deliver quality library and information service to all

2. To create an awareness and a sense of need for continuing education of library and information science personnel on the part of employers and individuals as a means of responding to societal and technological change

GOALS

1. To develop a process for continually assessing the continuing education needs of library and information science personnel at all levels and in all locales

2. To develop methods for responding to the continuing education needs of individuals and groups

3. To develop a coordinative mechanism for suppliers of continuing library and information science education at local, state, regional, and national levels, as a means of:

   a. insuring maximum use of existing resources
   b. eliminating unnecessary duplication of effort

4. To develop a delivery system for responding to the continuing education needs of individuals and groups

5. To collect and disseminate inter-disciplinary information relating to continuing education of working adults

6. To encourage broad involvement in planning, building, and modifying the processes of the Continuing Library Education Network and Exchange.

THE PICTURE

The organizational components of CLENE are an Assembly, a Steering Committee, an Administrative Board, a Panel of Review and Evaluation, a CLENE Executive Director, and a small central staff which carries out the main processes of CLENE and continuously serves as an exchange and resource facility for individual library personnel and for component groups who are members. The "picture" of the CLENE model is presented in Figure 3.1.

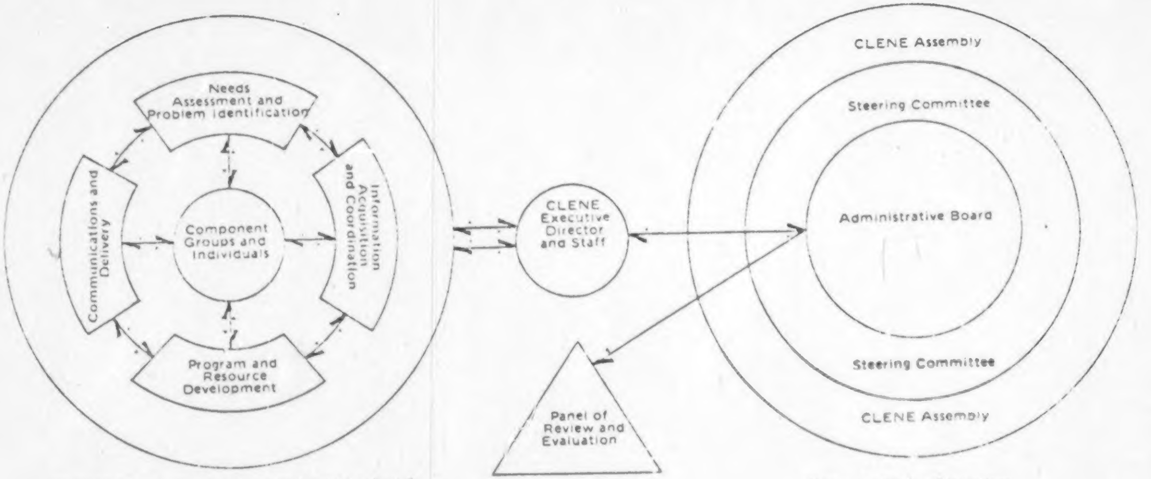
The acronym, CLENE (The Continuing Library Education Network and Exchange), implies both the people and the processes needed to accomplish the goals set forth. The NETWORK aspect of CLENE refers to those people -- Assembly, Steering Committee, Administrative Board -- who serve as representatives of the library community at large. The EXCHANGE aspects of CLENE are the processes needed to carry out the established goals. The NETWORK is made up of the people who do the serving as well as those who receive the service. The EXCHANGE aspects of CLENE are the process required for those services to occur.

BEST COPY AVAILABLE

CLENE

OVERVIEW OF CONTINUING LIBRARY EDUCATION NETWORK AND EXCHANGE: CLENE

ULTIMATE GOAL: QUALITY LIBRARY AND INFORMATION SERVICE


Needs Assessment and Problem Identification
Information Acquisition and Coordination
Program and Resource Development
Communications and Delivery
Component Groups and Individuals
CLENE Executive Director and Staff
Panel of Review and Evaluation
CLENE Assembly
Steering Committee
Administrative Board
Steering Committee
CLENE Assembly

CLENE, Processes serving the individual and local, state, regional, and national levels of the library and information science community.

Representative Structure
of
CLENE

What Needs To Be Done (Processes)	*Who Needs To Be Involved*
Needs Assessment and Problem Definition Information Acquisition and Coordination Program and Resource Development Communications and Delivery	Individuals Associations State Agencies Library Schools Libraries Information Centers Interest Groups

How CLENE Initiates, Supports, and Facilitates Its Getting Done	
Functions	*Part of CLENE Responsible*
Planning and Policy	Assembly Steering Committee Administrative Board
Implementation	Director and Staff
Evaluation	Panel of Review

FIGURE 1

ORGANIZATIONAL STRUCTURE OF CLENE

The Continuing Library Education Network and Exchange (CLENE) is a partnership involving all levels of institutional support: state agencies; state, regional, and national associations; national libraries; and schools of library and information science. It is built on the already existing Continuing Library Education Network which now includes representatives from accredited and unaccredited library schools; state, regional, and national library associations; state agencies, and individuals representing the national libraries; individual representatives of agencies of the Federal government concerned with development in the library and information science area; and individual library and information science personnel who have expressed an interest in joining the network. CLENE is built out of the necessity for common sharing of continuing education problems and plans for their solution. It is built on the premise that some degree of order and coordination needs to be built out of the jumble of the myriad of uncoordinated activities that now exist in order to achieve better library and information service and to achieve a more effective use of the public and private money dedicated to continuing library and information science education and the mutual need that each of these groups has in reaching the stated mission.

CLENE will build from and retain a broad base of shared responsibility for direction and decision-making for both policy and action. It will provide for the reality of local and state diversity and will assure the right of autonomous activity. It will offer opportunities for maximum involvement of all relevant and interested groups.

CLENE will give direction and leadership for evolving broad continuing education goals, and for dealing with issues of national importance (e.g., such as program evaluation, recognition systems, etc.).

State and local continuing education initiatives are encouraged by legitimatizing their cause, by assuring recognition of their statements of need, and by identifying resources to be tapped. Program designs, materials, and evaluative data go to CLENE to assure that other areas with similar needs can have access to that material.

CLENE COMPONENTS

The Assembly

Composition

It is suggested that the CLENE Assembly build upon the already existing Continuing Library Education Network (CLEN). Membership in the Assembly, in addition to the present CLEN members,might include the presidents, or heads (or designates); or persons indicated for each of the following 12 groups:

1. Library schools accredited by the American Library Association
2. Departments and schools of library science that are not members of the Association of American Library schools
3. Individuals concerned with continuing library and information science education (including persons knowledgeable in the related fields of educational technology; adult, continuing, and professional education; public administration)
4. National libraries
5. National library associations and members of leading national educational and related organizations such as the National Education Association and Association for Educational Communication and Technology)
6. Regional library associations
7. State library agencies
8. State library associations
9. Subscribing member libraries of CLENE
10. State planning committee (the persons in each state responsible for the statewide plan for continuing library and information science education)

11. Local committees for continuing library and information science education -- three persons in each state active in local committees for continuing education are selected by the State Planning Council. In selecting these persons consideration is given to all levels of library personnel -- librarians, operating librarians, technical information specialists, paraprofessionals, library technicians, and trustees -- as well as library users

12. Individuals (one person from each state) active in statewide planning for higher education as a whole, appointed by the governor (this member is chosen from the Education Commission of the States, if the state is one of the 44 members of the Commission)

Persons from branches of the Federal government such as the Library Services program officers of the Department of Health, Education and Welfare, and the Division of Libraries and Learning Resources of the U.S. Office of Education are invited as observers. A distinction is made between a member and a subscribing member. Both participate in Assembly meetings, workshops, etc., but only subscribing members vote and hold office.

Functions

The Assembly serves as a forum to identify current problems and issues of concern in continuing education. Papers presented at a meeting held annually or every other year are published and widely distributed to give visibility to continuing library and information science education at the national level. Groups represented have a chance to tell each other what they are doing in continuing library and information science education. The Assembly serves as a form of encouragement for those groups which are not deeply involved in continuing library and information science education. Also, represented groups outline ways in which CLENE can be of assistance to them in their continuing education efforts.

One means of accomplishing such a forum is to divide the Assembly members into workshops at the meeting; the subjects would be determined ahead of time by a survey of the membership to discover the most urgent topics that should be discussed. Examples of the type of subjects that might be covered in workshop sessions are: motivation for continuing education; planning continuing education activities for paraprofessionals; evaluation of programs and activities; organization of methods; financing; the role of the state associations in statewide planning for continuing education; the role of trustees in continuing education; the development of a reward system for continuing library and information science education;

providing continuing education for different staffing patterns in libraries and information centers; building continuing education courses for an "information service team."

An example of how the Assembly might obtain a representative sounding on critical problems and issues follows. Each individual of the Assembly attends two workshops. Reports -- in the form of suggested recommendations -- on what should be done in the various categories covered by the workshops at the local, state, regional, and national levels, and through CLENE are presented to the Assembly. These are either sent directly to CLENE as presented or the Assembly could take official action on them before forwarding them to CLENE.

Between meetings the CLENE Assembly acts as a communications network. Members receive a newsletter reporting on the activity resources of CLENE. In addition to providing a forum for the exchange of ideas in library and information science education and providing a means of making recommendations at the national level based on wide involvement of all those concerned throughout the profession, the Assembly elects a Steering Committee.

The Steering Committee

Composition

The operating body of CLENE is the Steering Committee. Members of the Steering Committee are elected by the voting members of the Assembly. Representation might be something like the following: one Assemblyperson (affiliated with a subscribing member) from each of the twelve component groups of the CLENE Assembly is selected for membership on the Steering Committee. In addition, each state and the District of Columbia elect an Assemblyperson to represent them on the Steering Committee. All members of the Steering Committee serve staggered terms to assure continuity.

Functions

Each member has liaison responsibility with the group represented but speaks from a personal perspective in Committee actions.

The Steering Committee has responsibility for:

1. Identifying problem areas (based on grassroots input) for the attention of the Assembly

2. Identifying priorities for CLENE

3. Suggesting policy alternatives

4. Reviewing and promoting the coordination of the various continuing education efforts in the library and information science field

5. Providing communication among the states on continuing education matters

6. Consulting with other agencies and organizations interested or active in the field of continuing education for the purpose of identifying and, when possible, coordinating with the total effort of continuing education in the United States

7. Developing ways and means for increasing the motivation of library personnel at all levels to continue their education

8. Giving visibility at the national level to the importance of continuing education for the library and information science community through publications and other appropriate means

9. Seeking ways of discussing current issues with public officials at various levels of government and with leaders in other professions

10. Electing an Administrative Board

The Steering Committee meets once a year, and its meetings are open to all Assemblypersons as well as observers. Members of the Steering Committee serve as requested on advisory committees and task forces formed to carry out special investigations and projects as decided upon by the Administrative Board.

The Administrative Board

Composition

The Administrative Board might consist of officers such as the following: chairperson, vice chairperson, chairperson-elect, treasurer, secretary, and four Board members-at-large. The members serve staggered terms to assure continuity.

Functions

The Administrative Board has responsibility for:

1. Formulating policy
2. Determining the major processes or activities in which the CLENE staff channels its efforts
3. Establishing policy guidelines for staff-administered programs
4. Authorizing studies and research
5. Identifying problem areas for attention of the CLENE staff
6. Encouraging research in continuing education needs, methods, and techniques
7. Making recommendations and plans for the improvement of continuing education.

The executive director of CLENE reports to the Board. The Board appoints the Panel for Review and Evaluation, and authorizes the formation of other advisory or technical committees or task force groups that it may deem necessary. The Board meets regularly two times a year and as many other times as it may decide are necessary to carry out its responsibilities.

CLENE Staff

The CLENE staff carries out the activities on a day-to-day basis in keeping with the policies set forth by the Steering Committee and the Administrative Board. The executive director of the CLENE staff employs the necessary staff members to carry out the clusters of activities, or processes, of CLENE (these are described in the next section) and administers all the activities of the staff. In consultation with the Administrative Board, the executive director appoints special task forces or advisory committees as directed by the Board. For example, the Administrative Board might decide via ad hoc task force groups, or research projects, to seek in-depth solutions to problems in such areas as: greater technology competency development; the development of a recognition and reward system for those engaging in continuing education via the Continuing Education Unit (CEU); the development of self-assessment resources for library and information science personnel; or standard conditions of library and information center employment relative to continuing education. In the fourth area mentioned above -- the development of self-assessment resources -- the Board might decide to seek and obtain a research grant, in which case the work would be carried out by a project director. In addition, the project would have an advisory committee, made up of members from the Steering Committee.

The executive director is authorized to employ, subject to the approval of the Administrative Board, ad hoc groups of experts to organize, facilitate, and innovate programs to meet priority needs as they are identified that are not already met by existing programs. The executive director is authorized to solicit funds for research necessary to carry out projects, as identified by the Administrative Board, which are not within the regular staff capability of CLENE.

The executive director is responsible for designing a flexible participative management system that enables the talent assembled within the CLENE staff to apply their energies to the design and development of systems that would solve some of the high-priority problems identified in this report and by the Assembly.

During the opening months of CLENE, the staff will be engaged in planning on three levels. The first level is to develop a precise description of those services, programs, and resources -- human and material -- that are already available and functional and capable of delivery to individuals and groups requesting help from CLENE. The second level involves working with state and regional members to work out and provide the details of a continuous needs assessment process which would make full provision for obtaining input at the grassroots level. The third level involves working with consultative design help to develop program and resource criteria and specifications for those services, programs, and resources which should be provided. Then efforts will be made to delineate alternative ways of moving from "what is" to that which "should be."

The Panel of Review and Evaluation

Monitoring the original planning and development effort and the services as they are provided by CLENE is an evaluation system developed along the general ideas of Stufflebeam (1972, a and b). There will be an evaluation team internal to CLENE operating in the environment where the data actually exist. The information collected will be provided in four dimensions according to the CIPP model. CIPP is an acronym; it stands for four essential kinds of evaluation:

1. C stands for Context, the Context in which the decision is set
2. I for Input, the Input to the function that will be affected by the decision
3. The first P for Process, the analysis of Processes that are or that have been engaged in
4. The second P for Product, the analysis of any Product effects

In order to ensure the objectivity of this internal evaluation system, an external assessment system is provided by the Panel of Review and Evaluation appointed by the Administrative Board and reporting to it, and made up of individuals of recognized expertise in library and information science and other areas closely related to CLENE objectives, such as those with special knowledge in educational technology, adult and continuing education in other professions, and public administration. The Panel would critique the internal system, gather data which would validate the internally gathered data, and make judgments about the overall effectiveness of CLENE, which would be reported to the Administrative Board.

RATIONALE FOR PROPOSED ORGANIZATIONAL STRUCTURE

The organizational model suggested here has been integrated with the Project survey data components from three models that are operating successfully in other disciplines. These are (1) the national structure of the Education Commission of the States (Education Commission, 1973); (2) the regularly scheduled assemblies of the Medical Representatives on Continuing Medical Education (American Medical Association, 1968); and (3) the structure of a statewide system of continuing education in nursing for the State of Indiana which provides for grassroots participation through the formation of local committees of continuing education throughout the the state (Carlley, 1974).

Although this model builds upon a partnership of existing groups and makes provision for widespread responsibility for continuing education at each level, including the individual and the employing library, it does provide for an enlarged role on the part of the state library agencies and state library associations. This would seem justified and necessary for a number of reasons:

1. The new federalism gives increased importance to states taking energetic action; states can plan together effectively only if they can identify and discuss issues together, mutually sharing information. Various forces in our society are converging to put renewed emphasis on state influence in the development of all educational policies. Both general revenue sharing and special education revenue sharing provide the states with an opportunity to administer federal funds for themselves.

2. State legislation is developing in many areas which is making continuing education mandatory for professions; states need an opportunity to share experiences on ways such legislation is being implemented in all professional groups.

3. The people -- all U.S. residents -- are demanding that more effective means of accounting for all expenditures for education be found. Sharing ways and means of providing such accounting through more precise measures of continuing education effectiveness would accelerate progress in this area.

4. This model builds on the concept that education, at whatever level, is constitutionally a state responsibility. It is the states , through their elected officials, that must respond if we are to realize the essential dream of American education, that all individuals regardless of race, mental or physical handicap, or the socioeconomic status, have the opportunity to develop the best that is in them throughout their lifetime -- not only for their own sake but for the sake of society as well.

5. The state library agencies are the only agencies which have implied responsibility for all personnel in the library and information science field and for providing library and information service for all U.S. residents. Individuals are free to join or not join library associations and, regretfully, many do not. This model is a way to strengthen the role of the state library as recommended in the report of the President's Advisory Commission on Libraries and Information Science (Knight, 1969, pp.495-504)

6. There is no single model all states should follow -- in determining resources, in pooling resources with neighboring states, or in developing long-range plans with all concerned in a state -- that would lead to coordinated state programs resulting in programs tailored to the concerns of the library personnel of a given state.

Each state and region has the freedom to develop the system that best meets its particular needs within available resources. But by providing an opportunity for states to move forward together, in partnership with other component groups concerned with continuing library and information science education, the model serves as both a resource and a catalyst. The model provides accurate and timely information on issues of common concern for all concerned with continuing education. It also has the ability to provide, on request, detailed alternatives for solving specific problems. By keeping all those concerned in each state informed of continuing education in all states, the model serves to stimulate continuing education renewal throughout the whole nation.

7. The model also provides a means of strengthening regional continuing education activities. It provides a periodic opportunity for states which have not formed regional associations to meet together and learn of the activities and progress of more fully developed regional groups. It also provides the opportunity for leaders of regional groups to meet together and share ideas.

8. Finally, in the interviews, the importance of states having a strong part to play in continuing library education is shown by the fact that 42 percent of the interviewees believed the states should have a prime role to play; 28 percent thought the library schools should have a leading role to play; and 15 percent each favored a strong role for regional associations and national associations.

In summary, the organizational structure of CLENE is built upon the philosophy that all component groups concerned with continuing education can work as a partnership to vitalize and generally improve continuing library and information science education throughout the nation. Its Assembly meetings, Steering Committee meetings, Administrative Board, task force , and advisory committee meetings provide opportunities for those concerned with continuing library and information science education to share mutual concerns, to discuss and debate common issues, and to recommend action to be carried out at the local, state, or regional level, or by the CLENE staff. CLENE also provides an opportunity for action and for a continuing education -- professional -- client mix.

IMPORTANCE OF LOCAL, STATEWIDE, AND REGIONAL PLANNING FOR CONTINUING EDUCATION

Although not a necessity for CLENE to be operative, CLENE will be much more effective if each state develops a coordinated statewide system of continuing education in library and information science and if leadership is shown at the regional level to pool resources and coordinate the continuing education efforts between several states, as exemplified by the Continuing Education for Library Staffs in the Southwest (CELS) of the Southwestern Library Association (SWLA) and Southwestern Interstate Cooperative Endeavor (SLICE).

Each state should be encouraged to work out its own master plan for a statewide system providing a structure for programming that will best meet the needs of the resident population of each section of the state. On request, CLENE could supply resource material and guidelines about what has been developed in other states, such as the New Jersey Council of Library Education or the Pennsylvania Library Master Plan, or models from other professions that have proved successful in the development of a plan for a statewide system of continuing education, such as the Indiana Plan for Statewide System of Continuing Education in Nursing (Carlley, 1974, p. 13) recently funded as a pilot project by the Kellogg Foundation (Kellogg, 1974, p. 30).

Successful planning and programming at the state level would seem to indicate that at a minimum any statewide plan should include the following elements:

1. A plan for an organizational structure for statewide continuing education in library and information science that provides for the reality of local diversity and assures the input of autonomous activity

2. A position statement on continuing education on a statewide basis

3. An interpretation of the concept of continuing education in library and information science throughout the state

4. Description and identification of continuing education needs of library and information science personnel at the local grassroots level based on meeting the needs of the resident population

5. A plan for the implementation and evaluation of statewide programs based on continuous needs assessment at grassroots level and based on continuous input to the planning process by all levels of library and information science personnel

6. Tactics for obtaining legislative support for a statewide plan for continuing education in the library and information science

7. Cooperation with the State Legislative Committee of the National Legislative Network for Libraries as a means of promoting legislation for continuing education

8. A plan for providing a coordinated schedule of continuing library and information science on a statewide basis

10. Cooperation with regional and national planning and programming in the area of continuing education

Inherent in the success of any specific aims adopted are ways and means whereby the statewide planning body provides the coordinated and supportive approach needed to assure active involvement of all levels of library personnel involved in local planning and action committees. The structuring of a statewide system of continuing education for library personnel on a bilevel basis (a statewide committee and active local committees) provides for statewide coordination, yet allows a local structure that can meet the needs of the resident population of each local area.

The composition of each local committee includes representatives from a variety of settings of those individuals and agencies having a direct relationship or concern for continuing library and information science education. This includes: a representative of a college or university library and information science program (and in those areas which do not have a library and information science program, a representative of another related discipline of the local college or university); all levels of library and information science personnel from the different types of libraries and information centers; trustees; and representatives of the resident population served. Wide representation at this grassroots level is essential so that library and information science personnel at all levels can have input into the decisions which are determined all too frequently by those individuals sitting in "ivory towers." Each local geographic unit gives input through its chairpersons into the state committee.

Ultimately, statewide planning should lead to outcomes such as:

1. The opportunity for library personnel at all levels in every area of a given state to maintain competence, meet changing standards of practice developed by the profession, exercise leadership in effecting changes in library and information science delivery services, and achieve career satisfaction

2. The establishment of continuing education on an equal plane with all other educational programs in each college and/or university which maintains a library and information science program

3. The integration of the statewide master plan for continuing education into the state master plan for library and information science education and the system of higher education of the state

4. The improvement of library and information service and the provision of new and emerging types of library services in a variety of settings for the resident population of the state

THE PROCESSES OF CLENE

This section develops a basic description of CLENE's Processes. The model suggested builds upon the framework established by the design specifications -- presented in the discussion of the research methodology -- derived from the data collected from the three survey instruments used in the study, and from an extensive survey of the literature. As a result of searching for models in other disciplines and professions with similar nationwide objectives and for those models that describe the knowledge utilization process, six sources (in addition to those mentioned in the previous section on organizational structure) were particularly helpful. These were:

1. Past and Present of the National Center on Educational Media and Materials for the Handicapped (NCEMMH) in which Belland (1973 a) describes the model in use by that Center

2. The Feasibility of a Technology Information Exchange as developed by Hoy (1973) to encourage "the exchange of innovative technology among city, county and state governments or between these governments and private enterprise, federal agencies, universities, foundations, and associations"

3. The description of the National Commission on Continuing Education of the American Dental Hygienists Association (1973)

4. A Report from the Joint Study Committee in Continuing Medical Education in which Dryer (1962 a) proposes a nationwide "university without walls" for continuing medical education

5. The description of the American Institute of Architects' continuing education activities as described by Rose (1973) at the continuing education mini-workshop sponsored by the Association of American Library Schools in 1973

6. The National Legislative Network for Libraries, developed by the Legislation Committee of the American Library Association (1973)

7. Studies by Havelock (1969), Rogers (1971), and Meyers (1969) presenting key concepts in the area of knowledge utilization theory

The various sources of information utilized by the Project showed four clusters of activities, or processes, to be essential for CLENE.

These functions of CLENE are grouped into four major processes:

- Process One: Needs Assessment and Problem Definition

  The first major process is aimed at continuous assessment of individual and group needs in the area of library and information science continuing education and is also aimed at the definition of common problems. The approach to the accomplishment of this process is through the actual participants, at local, state, regional, and national levels, deciding what their needs are and how they will learn. This process is necessary in order to assure the relevance and direction of the other three processes.

- Process Two: Information Acquisition and Coordination

  The second major process is the acquisition, coordination, and exchange of information about existing continuing education resources in library and information science and other professions, that are applicable to common needs and problems. It processes this information, stores, retrieves, and exchanges it in order to provide equal access to it for those persons who have need of these data. This group of activities serves as a prime source for the Program and Resource Development Process.

- Process Three: Program and Resource Development

  The third basic process responds to the Needs Assessment and Problem Definition Process by performing the planning, design, production, and evaluation of CLENE services. This major component is necessary for providing the programs and resources for making continuing education opportunities available in sufficient quantity and quality over a sustained period of time in order to assure personnel and organizations the competency to deliver quality information service to their communities.

- Process Four: Communications and Delivery

  The fourth basic process creates an awareness and sense of need for continuing education of library personnel on the part of employers and individuals; plans ways and means to deliver the materials to the user who needs them; and actively encourages interest, use, and evaluation of materials disseminated.

These four continuing education exchange processes are highly interrelated. No one of them stands alone. It takes all four processes working together and interfacing each other to achieve the established goals of CLENE. These four basic processes and their relationship to the organizational structure of CLENE are illustrated in Figures 3.1 and 3.2 and are described in the narrative discussion that follows. It is important to emphasize, however, that the specifics of the best way to carry out these processes are developmental and dependent on many factors: how the various bodies interact (e.g. states, associations, library schools, etc.); what resources are available; strengths of the CLENE staff; etc.

PROCESS ONE: NEEDS ASSESSMENT AND PROBLEM DEFINITION

CLENE engages in a Needs Assessment and Problem Description Process By means of this process CLENE helps library and information science personnel in gaining equal ~~access to opportunities~~ to define their own continuing education needs and problems. This process facilitates the development of need and problem statements at the local, state, regional, and national levels.

The statement of needs and the definition of problems received from the field, along with problems and issues identified by the CLENE Assembly and policy guidelines from CLENE's Administrative Board, determine the work that is done relative to the other three clusters of processes carried on by CLENE, namely: Information Acquisition, Program and Resource Development, and the Communication and Realization Systems.

For some geographical areas which do not have a system already worked out for continually assessing and reassessing their continuing education needs, CLENE might be called upon to develop with the leaders of that geographical area suggested guidelines for the involvement of individuals and groups at every level in needs assessment and problem definition. In other geographical areas which already have processes developed, CLENE might be called upon to provide resources to further already established processes.

It was suggested in the section introducing the organizational model for the network, that each state, in the development of its statewide system of library and information science education, encourage the formation of local committees on continuing education, and that the composition of these committees should reflect representation from a wide variety of settings which had a commitment to the future of continuing library and information science education. This representation should include members of the resident population in the area as well as representatives from library and information science programs of colleges and universities in the area, local library associations, and representatives from all levels of personnel in the employing libraries in the area including top administrators, paraprofessionals, and trustees. The active participation of city, county, township, or state government representatives should also be encouraged by inviting them to participate as observers. Representatives from other professional groups active in continuing education activities, and representatives from private enterprise, foundations, and federal agencies located in the area should also be invited to participate as observers.

As each local committee develops its own system for ascertaining needs and identifying problems, CLENE is available to offer consultant help to further the local committee's plans and directions. CLENE also suggests for review by local, state, regional and national committees, models that have been developed by other professional groups that might prove of assistance in the planning of the local group in developing its own processes for continuous needs assessment. Examples of two types of models that are gaining popularity in other professions are as follows:

Needs Assessment Through the Concept of Competency-Based Learning

Generally, throughout the professions it has been found that people resist continuing education when it is imposed upon them. The proposed model employs a voluntary action. It involves setting up a process in which the learners are involved in deciding what their needs are and how they will learn. Currently, the state-of-the-art as practiced most widely in other professions is to state needs in terms of competencies to be learned based on futuristic planning processes. One example of such a model, developed by Knowles (1973), is based on wide involvement at the grassroots level. It involves four steps.

Step 1. Determine the competencies that will be needed in the profession five to ten years from now.

This is accomplished through the involvement of think tank sessions. A resource for providing help in setting up think tank sessions and techniques to ensure effectiveness in futuristic planning is provided by Hanberry (1973 a). One of the keys to the success of a think tank is involvement of a wide array of individuals either active in continuing education or who have the potential and interest to participate in continuing education, and who have the ability to respond to the future in terms of alternative events. Participants in think tanks should include those served, as well as all levels of those providing the service. For example, a balanced representation in a think tank session would include: professional and paraprofessional library and information science employees; library trustees; representatives of the resident population served; professors of library and information science (or in areas where there are no library and information science programs per se, representatives of such academic disciplines as psychology, sociology, political science, public administration, educational technology, adult education); information/media specialists; community planners and developers; public officials (policy makers at the local level); all racial/ethnic and cultural groups in the area; representation of both rural and urban interests.

Participation can be on a purely voluntary basis with invitations sent out from the local continuing education committee. To ensure a balanced representation of all groups Hansberry (1973 a, pp. 9-11) suggests the use of specific procedures for recruitment, identification, and nomination of members attending think tank sessions.

Step 2. Learning goals are established based on the competencies needed

The list of competencies needed as determined by the local group is analyzed and a master list of competencies prepared for distribution. This master list could be compiled at either a state, regional, or national level, or a combination of all three. For example, the local list is sent to the state planning committee for continuing library and information science education, and provides a master list for the state; this, in turn, is sent to the regional continuing education planning group, which prepares a master list for the region, and this list is sent to CLENE which prepares a master list for the profession. Alternatives would be to send the local list directly to the region and then on to CLENE, or the local lists might be sent directly to CLENE for analysis.

Step 3. Identification of learning resources and strategy

Each individual who wishes to participate in individual needs analysis is sent a form to be filled out containing the master list of competencies, which are listed for each target group within the library (top administrators, reference librarians, paraprofessionals, library technicians, trustees, etc. Each individual performs a self-evaluation on the competencies possessed and on the competencies needed. Each individual also identifies possible learning resources or strategies that will help attain the needed competencies. The individual also lists the type of evidence, such as peer rating, that will indicate whether the competency has been acquired.

Step 4. Evaluation of learning: evidences of acquired competencies

The individual sends a carbon of the form back to the individual specified at either the local, state, regional, or national level, who analyzes where resources are needed and who then takes steps to provide them for the individual. Evaluation techniques might also be suggested that have not occurred to the individual are several alternatives possible for selecting the individual to whom the forms are returned for the evaluation of learning process: (1) the use of Linkage Agents as suggested in the next section; (2) appointment of a person or persons by the statewide planning committee in each state; (3) designation of a person or persons by the regional continuing education committee in each region; (4) the return of the forms to the CLENE staff; (5) designation of a professor of library and information science in each local area or on a statewide basis to perform this function.

This model, which is catching fire in other professions, is one that could be very helpful to library personnel as it can identify the knowledge, skills, attitudes, and performance needed for delivery of library and information service in response to client need for each level of employee in the library; it can also yield a basic core of competencies that is needed by all librarians. It also serves as a way of developing the concepts of differentiated staffing and the development of library and information science teams. A library and information science team is a group of professionals with their respective associated paraprofessionals, technicians, and other essential personnel whose overall goal is the promotion of quality library and information science service and who, by cooperation, coordination, the integration of effort, and the use of modern technology, provide library and information service for the resident population embracing the sum total of relevant knowledge.

For the effective use of this model several conditions should obtain. The processes described will only be valuable as accurate indicators of needs if they are carried out at periodic intervals. If the model is going to serve the end goal of being genuinely responsive to the needs of the resident population, then care should be taken that there is involvement of those members of the resident population who cannot articulate their needs, as well as those who can. This model should serve as an incentive within the profession to reexamine its basic role; its models of professional practice; and its boundaries. Another strength of the model is that it involves in a collaborative fashion those in other professions and thus gives recognition to the fact that: "Many of the more pressing problems that face society today are so complex that no single profession can ever hope to deal with them effectively." (Schein, 1972, p. 34)

Individual Needs Assessment Facilitated by Means of Linkage Agents

This model for needs assessment is based on the widely accepted assumption that individuals must usually participate in the needs appraisal process by which their own deficiencies are identified, if they are to be motivated to close the gaps that exist in their performance by means of self-directed continuing education (Knox, 1973, p. 21). It is a difficult task for many individuals to describe specifically their present knowledge, skills, attitudes, levels of performance, and to describe the behavior to which they aspire, and then to discover how these two categories of competencies are perceived by others. To help individuals in this task, Knox (1973, p. 36) advocates the use of Linkage Agents to assist the self-directed learner in the needs appraisal process.

Linkage Agents serve as links between learning resources and practitioners engaged in learning. The Linkage Agents work with individuals to help them accomplish three objectives as described by Knox (1973, p. 9):

> One is to use precept and example to help professionals develop a more complete understanding of the importance and methods of life long, self directed education. A second is to encourage and assist professionals to become more self directed in their continuing education. A third is to develop procedures and aids that will increase the accessibility of learning resources for professionals who want to assume the primary responsibility for continuing education.

Hopefully, each local continuing library and information science education planning committee would have at least one person serving as a Linkage Agent, assisting library and information science personnel who want help in pursing their continuing education.

Knox (1973, pp. 79-80) lists and discusses a wide array of ways in which a Linkage Agent can facilitate the individual's effective assessment of needs, so that learning activities can be selected and organized by and for the individual. For example, through helping the individual in periodic appraisal of needs, the Linkage Agent could provide:

1. An overview of how the individual can use a needs appraisal process so that it will serve the individual's purposes well
2. A guide for the collection of data so that the individual will have an active view of his or her own current performance
3. Community data about the needs of the resident population

There are numerous ways the Linking Agent could help CLENE it its functions. For example, the Linkage Agent could:

1. Encourage CLENE to develop new materials and develop more effective delivery systems for self-directed continuing education, such as video cassettes, home study courses, single concept films, and computer based education

2. Provide CLENE locally developed materials that could be redistributed to other areas

3. Provide CLENE with names of experts who could serve as educational resources

4. Serve as a review and evaluation board for new programs and resources developed by CLENE, along with other members of the local continuing library and information science education planning committee

Likewise, there are numerous ways in which CLENE might help the Linkage Agents in their tasks. For example, CLENE could:

1. Provide guidelines for the Linkage Agents in performing their role of facilitating self-directed, life-long education

2. Alert Linkage Agents to new programs and resources, valuable for library and information science personnel, that had been developed by CLENE or by other groups

3. Offer consultant service to local, state, regional, and national continuing library and information science education planning committees, stimulating an awareness in the individual of the the importance of self-directed continuing education

In areas where there are no Linkage Agents CLENE could temporarily serve this function by means of person-to-person correspondence or phone conversations.

This model is based on an approach which emphasizes life-long, self-directed education. To help individuals in continuously educating themselves, the model developed consists of five components:

1. Identification of needs in relation to job performance

2. Awareness of facilitators of and barriers to continuing education
3. Selection of high priority objectives as related to desirable library and information service and feasibility
4. Selection and organization of learning activities that will produce and sustain effective performance
5. Evaluation of the extent to which the continuing education activity meets the expectations of the people associated with it.

This model places the main responsibility for continuing education on the individual practitioner, but it recognizes that the individual needs a great deal of support in this endeavor. It also recognizes that there is a vast amount of difference in the degree of self-directedness among individuals and the amount of assistance they need; and that there are limitations and barriers to self-education such as its propensity toward short-sightedness, lack of time, and local resources. For those individuals who want help in continuing self-education the model suggests the provision of leadership through the use of Linkage Agents and careful planning based on continuous needs assessment by the individual. Key words in the use of the model are involvement and environment. The expected ultimate result should be improved library and information service for the resident population.

Determination of Program and Resource Development Based on Identified Needs

The local committees for continuing library and information science education send their need and problem identification statements to the state planning committee for continuing library and information science education annually. The state committee collates and analyzes information received and sends it to CLENE for consideration. In instances where there is no active state committee, local committees send their statements directly to CLENE. An alternative pattern would be for the states to send their statements to the regional continuing library and information science office for collation and analysis, which in turn would forward its collective statement to CLENE.

The Needs Assessment and Problem Description Process takes these data problems, and issues identified by the CLENE Assembly through the holding of small workshop sessions, as described in the organization section, plus a summary of needs identified by CLENE through received requests which could not be met by existing resources, and performs a preliminary feasibility study on needs identified. This information is transmitted to the CLENE Administrative Board annually. Annual national program and resource development proposals are offered by the Board, such as suggestions to the profession, to be modified by individual, local, state, regional, and national needs and recommendations for collaborative university and professional association teaching.

To ensure that feedback is obtained from all levels of library personnel, all concerned component groups, a sample of users and potential users of library services, the Needs Assessment and Problem Identifcation Process would send the program and resource development proposals to local, state, regional, and national planning committees for reaction and refinement. In addition it would employ a variety of methods as approved or directed by the Administrative Board to get direct reaction from individuals such as: mailed questionnaire surveys, conference telephone calls, charettes, personal correspondence, and market surveys.

After a specified amount of time has elapsed,. the Administrative Board establishes priorities for the program and resource proposals in order to assure representative feedback from the field. The Administrative Board makes plans to proceed with one of the following routes:

1. To issue requests for proposals for programs and resources on which research is needed beyond the capacity of CLENE

2. To direct the Program and Resource Development Process of CLENE to develop products related to priority needs

3. To select a national "faculty" made up of expert and scholarly teachers in the subject matter to be covered by the program development and to authorize the selected group to develop a specific program or resource in collaboration with the Program and Resource Development Process of CLENE

4. To authorize the Program and Resource Development Process of CLENE to do further development on existing programs or materials and prepare them for distribution

5. To appoint task forces on a critical issue or problem. These would investigate present alternative courses of action and media, and make recommendations, which might serve, when completed, as guidelines for development in a given area (an example might be the Task Force on Rewards and Recognition System).

In summary, the Needs Assessment and Problem Definition Process is aimed at developing a needs and problem statement at the local, state, regional, and national levels by those individuals and agencies operating at those levels. The approach to the accomplishment of this process is through the actual participants continuously assessing their needs and how they will learn. Current state-of-the-art indicates that these needs can be defined in terms of competencies to be learned based on futuristic planning processes.

While the model places the main motivational responsibility for continuing education on the individual practitioner, it recognizes that the individual needs a great deal of support in this endeavor. To facilitate this needs assessment process on a continuing basis, the identification of Linkage Agents is suggested.

The Needs Assessment and Problem Definition Process interfaces with the Information Acquisition and Coordination, Program and Resource Development, and Communications and Delivery Processes. The Needs Assessment and Problem Definition Process is necessary to assure the relevance and direction of the other three processes.

PROCESS TWO: INFORMATION ACQUISITION AND COORDINATION

The second major process of CLENE is the Information Acquisition and Coordination Process. This Process acquires, coordinates, and exchanges information about existing continuing education resources applicable to needs and common problems, in order to increase the accessibility to available resources. The Information Acquisition and Coordination Process is organized in such a way that it can be used by individuals in their self-directed education and also by groups in their continuing education activities. This Process makes maximum use of existing information services, such as clearinghouses, information analysis centers, technology utilization centers, technical information systems, and library reference services. This Process establishes a central data base about these services (such as promotional material, contact correspondence, product descriptions) and acquires from these services materials in the form of reports, abstracts, and bibliographies as needed, but it does not compete with or duplicate existing services.

Major Tasks

The Information Acquisition and Coordination Process establishes a library that subscribes on a selective basis to professional journals and association magazines. The library builds a highly specialized and extensive reference collection on continuing professional and adult education, on learning theory and practice, and educational technology and related subjects as need arises. The library includes published and unpublished reports and documents which can be made available to members of CLENE. The library creates a legislative information service related to existing and proposed continuing and professional education legislation in the states and publishes a legislative review (newsletter) of up-to-date information about pending and proposed legislative action relative to continuing education and certification. Efforts will be made to coordinate this legislative effort with the already established American Library Association Legislative Network and other professional associations (such as the Adult Education Association) which have similar interests and concerns regarding continuing education legislation.

This Process establishes a local, state, and regional problem statement file. In addition to the problem statements coming from the field, it collects additional problem description material from such sources as meetings, conferences, correspondence, and site visits. The Process also collects periodical articles, bibliographies, and published and unpublished reports relative to the problems identified. This material serves as a prime source of information for the Program and Resource Development Process.

The Information Acquisition and Coordination Process establishes by geographic areas a centralized file system of persons with expertise in continuing education and in current subject areas of high priority, as identified by the Needs Assessment Process. This file of specialized expertise is used by the Program and Resource Development Process to help find the assistance needed to assemble new CLENE products. Also it is used for a referral service to groups looking for specialized expertise in the development of their own programs.

The Information Acquisition and Coordination Process keeps an inventory of continuing education programs developed by library schools, library associations, state library agencies, employing libraries, and others. It also keeps an archival file of all CLENE developed programs and resources. The Process establishes a system whereby individuals or groups can obtain information on:

1. The time and place of schedule programs
2. Available programs or resources they can use in their present form
3. Available programs or resources they can use in the development of their own programs

Information can be requested and obtained by phone or mail.

The Information Acquisition and Coordination Process establishes a selective dissemination service for CLENE personnel and for the Administrative Board. The service seeks to give maximum exposure to new concepts, procedures, publications, people, organizations, and problems in adult, continuing, and professional education in library and information science and in other professions and disciplines.

Centralized Record Keeping of Individuals' Continuing Education Activity

The activities of the Information Acquisition and Coordination Process outlined up to this point have been suggested by the many respondents to the questionnaire and individuals interviewed in the study. There seems to be general agreement that these functions would be in keeping with CLENE objectives and should be recommended to the Administrative Board for implementation. However, there is one activity strongly advocated by some of those who participated in the study, strongly opposed by some, and not mentioned as an activity by others.

This activity is the establishment and maintenance of a centralized record system for proof of participation in continuing education activities. This is a question that is being faced universally throughout the professions. Closely related to this issue are two others: (1) the giving of some type of recognition for continuing education activity, including noncredit continuing education activities; and (2) accreditation or approval of programs for which some type of record is kept. Because many questions were asked of the Project team in these areas during group presentations, the following paragraphs highlight some of the issues involved.

Generally, a centralized record system for continuing education activity is viewed as an administrative routine; a tool for giving some tangible recognition for participation in continuing education activities. Usually such a centralized system is related to a specific form of recognition. For example, in the American Medical Association, it is related to the Physician's Recognition Award (issued to 11,000 physicians in 1972) (American Medical Association 1973) which recognizes six categories of activities. One category is Continuing Medical Education Activities with accredited sponsorship (the only category for which there is no limit on the number of hours that can be accumulated toward 150 hours required to receive an award). Another example is the Professional Acknowledgment for Continuing Education (P.A.C.E.) program of the American Society for Medical Technology (Roach, 1973). In the P.A.C.E. program special certificates are issued for specified levels of participation; regularly the individual is sent a record of his continuing education as kept in the central file; an individual can request a copy of his file or transcript to be sent to a particular employer. The P.A.C.E. system is computerized; the AMA programs is not, but preliminary plans are being made to automate its system. In both cases the records are permanent and confidential.

However, not everyone is a proponent of uniform record keeping. Advantages as well as disadvantages are pointed out by Long (1974, pp. 268-270, 277), even as was reflected in the data collected for the present study. Some individuals maintain that the importance of a learning experience is what is learned -- no credit awarded -- and that continuing education will take a step backward when it comes necessary to keep multitudinous transcripts and records. Other negative perceptions are that the emphasis on "quality" and consequent testing will discourage participation; that central record keeping is an invasion of privacy and smacks of undue control; and that the criteria established will tend to give a bland sameness to all continuing education experience. Another barrier is the difficulty and expense of keeping the records accurately and up-to-date for a large population. These factors have just led the American Dental Association and the Council on Dental Education (American Dental Education, 1974) to recommend the discontinuance of plans for a national record keeping system.

Once a decision has been made to maintain a central record system, the question arises as to what shall be recorded. A decision has to be made if there will be any record of noncredit continuing education activities. The leader in the movement for developing a uniform system of measure and recognition of individual participation in noncredit continuing education activities has been the National Task Force on the Continuing Education Unit (CEU) which developed the CEU and has defined it as "Ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction." (Southern Association of Colleges and Schools, 1972, p. 19). It is a uniform measurement for noncredit continuing education programs. The National Task Force on CEU (35 participating organizations) has attempted to develop a uniform, nationally accepted unit that would ultimately help reduce the confusion and fragmentation of those programs currently recognizing individual effort in the pursuit of continuing education. The CEU is the result of that objective. Criteria for the CEU have been established by the Task Force over the past several years. Rapid development has been given to the movement by its adoption in Standard IX of the Southern Association of Schools and Colleges in December 1971 and its subsequent adoption and use by the University System of Georgia (Georgia State University, 1973).

As a result of this activity, professional associations, such as the American Management Association, are currently giving intensive study and consideration of the adoption of the CEU. An illustrative example is that of the Indiana Statewide Planning Committee for Continuing Education in Nursing (Indiana, 1974, pp. 26-29). This committee has just issued a "Landmark Statement" entitled "Indiana Standards for Assessment Factors for Reviewing Continuing Nursing Education Courses for Continuing Education Units." On the basis of this activity and statewide plans for implementation of these standards, the W.K. Kellogg Foundation ("Statewide Plan Funded by Kellogg, (1974, p. 30) has awarded a grant of $373,781 for the efficient and effective use of Indiana's higher educational resources to provide quality voluntary continuing education activities worthy of providing a uniform measurable noncredit CEU.

However, not everyone is in agreement with the use of CEU's and Long (1974) also delineates arguments for and against. One of the chief issues that is raised is how possible is it to maintain quality control in the case of CEU's or any other recording system. This leads to decisions about ways of evaluating and/or approving the programs offered to determine if CEU's or other types of credits can be accepted for recording. Both the American Medical Association and the American Society for Medical Technology have worked out detailed guidelines specifying when and under what circumstances the individual's experience will be accepted for recording in the national system. (Continuing Education Courses, 1973).

Beginning in August 1972, the American Medical Association listed in its yearly complete listing of Continuing Medical Education Courses (2,441 offered by 697 institutions for 1973-1974) only those courses provided by institutions or agencies that have met minimum standards as stated in "The Essentials of Approved Programs in Continuing Medical Education (American Medical Association, 1970). Since 1971, this ruling includes institutions or organizations (including hospitals and professional associations) which have been accredited by a state medical association whose program of accreditation has been periodically reviewed and improved.

In the P.A.C.E. program of the American Society for Medical Technology a Program Review Committee develops criteria and guidelines that must be met by each institution offering courses if the CEU's are accepted for the central record system. To be approved a given course has to provide, among other items, a rationale for the offering, course objectives, and evaluation plans which have to be approved by the Progress Review Committee (Roach, 1973, p. 20).

With the emphasis throughout the nation today on accountability and evidence of continued competence throughout one's career, it would seem that accurate record keeping and use of the CEU are a trend of the future. Centralized record keeping would serve a particularly useful purpose in library and information science continuing education for operating librarians (without a Master's of Library Science degree) and for paraprofessionals. The respondents to the questionnaire survey ranked these two groups second and third highest in order of priority they thought personnel should receive on a nationwide basis over the next three to five years (see Table 13, Appendix B).

Central record keeping and the CEU provide a means by which these two groups can receive recognition and can demonstrate their concern for life-long learning. For example, some paraprofessionals are now unable to quality for admission to many college and university programs. The efforts they make at association-sponsored activities are not recorded anyplace. Thus, they have no evidence to show an employer that they had had the continuing education learning experiences qualifying them to undertake many of the tasks that they could perform as well as, or in many cases, more efficiently than MLS librarians who have been trained for different tasks.

One of the key problems emphasized in the recent comprehensive study of the Public Library and Federal Policy (Wellisch, 1974, p. 160) is the inefficient use of paraprofessionals. Other studies have found the same to be true in other types of librarianship. For example the Association of Research Libraries' (1973) study of Columbia University Library recommended that a large group of tasks formerly performed by MLS librarians could be more efficiently and economically carried out by paraprofessionals; their reorganized library structure provides for making better use of all library personnel. A documented system of keeping a record of continuing education study would provide a potential source for use by individuals as evidence of their continuing education involvement.

On the basis of the data collected in this study and the experience of other professions with record keeping and recognition systems, such as the American Medical Association's Recognition and Award System (American Medical Association, 1970), and the American Society for Medical Technology's P.A.C.E. system, it is recommended that the Administrative Board give serious consideration to appointing a task force to study in depth the questions surrounding the advisability of establishing a centralized record system and the related issue of adopting a system for the measurement or recognition of noncredit participation in continuing education activities.

Concurrent with the study by the Task Force, the Administrative Board, in as comprehensive a manner as possible, should take steps to gather grassroots reactions from library personnel for use by both the Administrative Board and the Task Force in their planning activities. Further input could be obtained through one of the suggested workshop sessions for the first meeting of the CLENE Assembly.

In summary, the Information Acquisition and Coordination Process is to interface with the Needs Assessment and Problem Description, Program and Resource Development, and Communication and Delivery Processes. The Information Acquisition and Coordination Process supplies the background materials, surveys, and studies for the Program and Resource Development Process.

PROCESS THREE: PROGRAM AND RESOURCE DEVELOPMENT

The third major process of CLENE is Program and Resource Development which on two levels engages in the planning, design, production, and evaluation of services.

The first level of Program and Resource Development represents the facilitative aspects of CLENE. It develops a precise description of those services, materials, and resources that are already available and functional in delivering continuing education opportunities to library and information science personnel, and by means of a review process provides for wider distribution of selected offerings already in the field. This facilitative level also provides for consultative service.

The second level, working with consultative design help, develops program and resource specifications for those programs, resources, and services that should be provided, based on the findings of the Needs Assessment and Problem Description Process. Then alternative ways of moving from "what is" to "what should be" are delineated.

Guidelines for Continuing Education Programs and Resources for Library and Information Science Personnel

For both levels of activity, the Program and Resource Development Process follows guidelines for continuing library and information science education formulated and issued as a Position Statement by the Administrative Board of CLENE. These guidelines are given wide visibility throughout the field of library and information science so that they serve as a guide for the development of programs and resources to local, state, regional groups, professional associations, employing libraries and individuals, as well as to the Program and Resource Development Process of CLENE.

These guidelines are reviewed annually in order to reflect rapid changes in new knowledge and technologies, continuing social change, new learning theories, and research from related disciplines that have implications for adult learning. These changes make quality continuing education programs an imperative.

The guidelines will reflect the philosophy that continuing education is primarily an opportunity for the individual library employee and and will endorse the concept of continuing education for library personnel as one means by which library personnel can maintain competence, meet standards as they are developed by the profession, exercise leadership in effecting changes in library delivery services, and achieve career satisfaction.

In the original formulation, as well as constant review of the guidelines, the Administrative Board of CLENE provides for continuous input from the field, which includes information and recommendations received from the CLENE Assembly, the Steering Committee, local continuing education committees, regional or state planning committees, and data received by the Needs Assessment and Problem Description Process of CLENE.

The following suggestions for inclusion in the guidelines have come from the survey instruments used in this study and from the continuing education literature of other professions:

1. Programs should be relevant to the educational needs of the learner and relevant to the library and information needs of the consumer, as identified systematically at local, state, and regional levels
2. Programs should provide for the active involvement of the participant in the learning process
3. Programs should be under the direction of personnel who are knowledgeable in the concepts of adult education and skilled in designing and implementing the various learning experiences
4. Programs should use a systems approach in planning; objectives should be defined for each continuing education program and used as a basis for determining content, learning experiences, and evaluation

5. An interdisciplinary approach to programming, including sponsoring, planning, and implementation should be considered in meeting the library and information needs of the citizenry

6. Provision for evaluation should be a continuous process for overall planning, and each specific program should be evaluated by sponsors, learners, and consumers

7. Sponsoring agencies should provide appropriate facilities and resources to implement the program, i.e., audio-visual aids, library, conference rooms, record system, and secretarial services.

8. Counseling and guidance services should be made available to assist learners in establishing their goals, as well as to inform leaders of continuing education opportunities

9. Programs should be sponsored by colleges, universities, schools of library and information science, library agencies, and professional organizations

10. Programs should be adaptable to and should meet the needs of various settings such as those of rural and urban areas, and varying kinds and sizes of libraries and information centers

11. Programs should provide for various levels of need within each subject field, incorporating the principle of differentiated staff, and should enable an individual or group to enter into the learning experience at the suitable level

12. Programs should promote and support innovation and creativity in library and information services

13. Programs should improve the ability of library and information science personnel to meet the specific needs of the publics served by the library

14. Programs should assist learners to assume responsibility for growth and development in their careers

15. Programs should help learners implement meaningful change both within their own performance and throughout the library and information science delivery system

16. Program content priorities should be reviewed annually and changed according to needs identified at the local level and in keeping with sociological and scientific advances, new technology, demands for new service patterns, and the influence of new trends

17. Program opportunities should be designed to meet the personalized criteria of individual practitioners and continuing opportunities offering a variety of content and methodology should be made available at a time, place, and pace convenient to each practitioner.

The Facilitative Aspects of CLENE

Provision for Wider Distribution of Selected Offerings Already in the Field

One of the purposes of the Program and Resources Development Process of CLENE is to make available to appropriate publics materials already developed. At present there is a wide array of programs and resources that have been developed to meet specific continuing library and information science education needs. Unfortunately, few are disseminated to a wider audience. Some of the reasons include insufficient funds, personnel, or knowledge of marketing. The need for collection and evaluation of these materials as they are produced became evident as the current study proceeded.

Respondent after respondent urged that coordination rather than duplication of existing programs, services, and development should be emphasized. The questionnaire survey made it apparent that a national system is needed to inform people about the existence of continuing library and information science education materials regardless of source or delivery point. Thus, the Program and Resources Development Process of CLENE considers it a part of its work scope to design a system that will deal with the universe of materials likely to benefit library and information science personnel seeking continuing education opportunities.

The respondents also emphasized that materials that may have been successful at local or state levels not merely be identified and redistributed without being validated on a wider audience. The model presented for review of offerings is based on a model developed by the National Center of Education Media and Materials for the Handicapped (Belland, 1973 a).

First a call goes forth for programs and resources available for distribution in one subject area, such as the care and preservation of library materials. Concurrently, the Information and Coordination Process searches its files for any programs developed in this area, and forwards them to the Programs and Resource Development Process.

When a sufficient number of programs and resources have arrived at CLENE, a review process is set in motion.

During the time that the materials are collected, an evaluation form is designed to determine which materials CLENE will continue to work with and see disseminated. The form developed is sent to various members of the CLENE Assembly for review and comment before it is considered ready for use.

After the programs and resources are received they are divided into groups based on the populations they were designed to serve. These groups represent the different levels of library personnel: library directors and top administrators, librarians, paraprofessionals, technicians, clericals, operating librarians, technical specialists, and trustees. Or if there aren't sufficient offerings to review or warrant such a division, each reviewer is asked to indicate the target group or groups the offering would best serve and to what degree of effectiveness.

A Selection Review Panel is selected by the Administrative Board and contacted to cooperate with CLENE in the review of these materials by meeting together to engage in a selection process. The panel members represent the subject matter areas of the offerings and the levels of library personnel to be served. At least one member of the panel is an expert in the continuing education needs of paraprofessionals and library technicians. In addition, two educational technologists serve as panel members to ensure that the technical qualities of the materials are evaluated.

The Selection Review Panel decides to which of the four following categories of activities materials are assigned:

1. Disseminate in present state through CLENE delivery system. For those materials deemed ready for dissemination by the Selection Review Panel, the Communications and Delivery System Process arranges for their market and distribution. This includes providing assistance in copyright clearance and contract negotiations. In some instances the actual production of copies and direct distribution of products will be CLENE's responsibility

2. Field test and review results and resubmit them to the next Selection Panel meeting for review

3. Materials that have initially been generated in the field and have had some prototype field testing completed, are accepted in principle

by the panel, but are not approved as ready for distribution. These materials will be revised, recycled, field-tested, and polished before national distribution is attempted.

4. Materials that do not meet the evaluation guidelines are rejected.

Consultant Service

Another facilitative service provided by the Program and Resource Development Process is a consultant service. CLENE offers a consultant service to assist in the development of local, state, regional, or national continuing education committees. Qualified consultants are available to work with any interested group in planning, implementing, and improving continuing education opportunities.. For example, the consultant might work with a committee to plan a workshop or might participate in a workshop -- or help a group in organizing a statewide plan. The purpose of the consultant service is to offer ideas to further the plans and directions of groups providing continuing education opportunities. The consultant is available to assist local committees, state planning councils, and regional committees, as well as professional associations or employing libraries, in adapting the services and processes provided by CLENE in fulfilling their role in the nationwide plan for continuing education.

Program and Resources Developed by CLENE

After it has been determined what programs and resources are available, and which of these are suitable for distribution either after refinement or in their present format, the second level of activity of the Program and Resource Development Process works with consultative help to develop program specifications for those services identified by the Needs Assessment and Problem Identification Process that do not duplicate existing available offerings. The task is to delineate alternative ways of moving from "what is" to "what should be." After alternatives have been specified, recommendations for programs and resource development are presented to the Administrative Board, along with other alternatives under consideration. The Administrative Board authorizes the programs and resources that are to be developed and indicates in which of the following three ways these new programs and/or resources are to be designed and produced:

1. By members of the CLENE staff in those areas where the necessary expertise is available in-house; or

2. By a national "faculty" made up of expert subject and instructional specialists who are selected and employed by the CLENE Administrative Board, on an ad hoc basis; or

3. For CLENE on a contract basis by the agency best able to do it in answer to request for proposals

As it is only through some type of evaluation process that meaningful improvement of the quality of offerings and resources can be assured, each offering involves some type of evaluation process. This is carried out in four dimensions jointly among sponsors, leaders, learners, and consumers of the program or resource. Suggested means of evaluation in these four dimensions are included in each program or resource developed by the Program and Resource Development Process. Examples of evaluation instruments and procedures abound in the continuing education literature of other professions. One of the most sophisticated instruments for course evaluation that combines learner and teacher evaluation in one form is the one used by the American Institute of Bankers (Cavalier, 1973).

As a result of the evaluative process a value judgment is made as to the worth and effectiveness of the program or resource. Did the continuing education offering meet the goals and objectives set forth? What changes need to be made? A determination is then made by the Program and Resource Development Process on necessary changes that should be made and how to implement them. New objectives may be formulated, suggested improvements incorporated in the program, and future activities planned. Programs are continuously relevant to continuing education needs because outdated concepts are eliminated and new approaches implemented.

The suggestions presented in this section do not represent a definitive list, but only represent types of programs and resources currently possible for implementation that have been suggested by those respondents who participated in this study, or that have been successful in other professions. In relation to the model, they represent the type of alternative programs and resources that are presented to the Administrative Board for authorization.

The Programs presented are:

1. Series of transportable programs

2. Packages of continuing education materials

3. Self-instructional learning courses

4. Audio-cassette tapes
5. Special task forces for high priority areas such as technology competency development

Series of Transportable Programs

In areas determined by the Needs Assessment Process to have high priority needs, programs are developed for one or two three-day workshops, entitled Transportable Learning Laboratories (as each individual participant has the opportunity for learning through participation in a number of tasks). Experts throughout the nation with expertise in both the subject content of the program and in leading groups are engaged to lead these transportable labs. If a leader has only subject expertise but no experience in the techniques of teaching by group methods involving participation of all enrolled in learning experiences, the leader receives an intensive course in teaching by group methods before being sent out or recommended as a leader by CLENE. Local arrangements are left up to the group wishing to put on a learning lab, but specification sheets indicating facilities required are provided by CLENE. An adaptation of the Transportable Lab is the use of the program developed by local leaders who have the expertise in the subject and in group learning techniques. The advantage here is that local groups can make adaptations to meet local needs, such as space and time scheduling when there is no conflict with work (in the evening, lunchtime, or in the morning.) In an effort constantly to improve the quality of the labs, evaluation procedures are not only carried out at the time of the lab, but each participant fills out an evaluation sheet three months later.

Based on the data received from survey instruments used in the present continuing education study, it would seem that there is a demand for transportable learning laboratories focusing on the training of continuing education leaders, and in the subject areas of library management, automation, and use of the new media. One respondent suggested that "since few women and minorities (percentage-wise) are administrators, special emphasis should be placed on their training for advancement."

An additional feature of the learning laboratory experience is that participants go back to their own library organizations with a kit of materials to help them in the job situation. This might include such items as a package of readings, programmed texts, role playing situations, multi-media aids, cassettes, and samples of items discussed or developed in the lab, such as budgets or union contracts.

Packages of Continuing Education Materials

Packaged materials are developed in subject fields and in the area of planning and implementing successful continuing education programs at local, state, regional, and national levels. Needs in the latter area expressed in the present survey include materials on how to:

1. Determine continuing education needs locally
2. Evaluate continuing education programs
3. Use the new technology to give better library and information service
4. Conduct a successful library or information center orientation program for new employees

Self-Instructional Courses

Although self-instructional, or home-study courses (as they are generally called in the literature), did not receive a high indication of interest in the questionnaire survey (see Tables 20-25),* every indication in the professional literature here and abroad reveals that there is a definite trend in this direction (Rebel, 1970, p. 71). Rebel estimates that there are 2.35 million home students in 15 countries in the field of university home study for the professions, with the number of students increasing all over the world, including the United States.

The writers of this report believe that home-study courses also present a feasible way of meeting the widely diverse needs of individuals. Purposely, on the questionnaire (see Tables 14 and 15),* respondents were asked to name what they thought were the areas of greatest need for each target group in the library -- librarians, paraprofessionals, technicians, clericals, operating librarians, information specialists, and trustees. Although in every category, the major content areas were the same -- automation, management, human relations, new media -- these were listed in such a vast array of subjects and specializations that it would be unlikely that a large group would ever wish to study in a course format at one place and time. To this wide array of needs, home-study courses would seem to provide at least a partial answer.

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* In Appendix B

Another advantage of home study courses is that they provide the opportunity for continuing education that is available at a time, place, and pace convenient to all library and information science personnel, and that further courses can be specifically designed for a special target group, such as paraprofessionals, trustees, or library directors. They also provide an incentive for making the library a learning center in the same way that many hospitals have been transformed into teaching hospitals.

Some of the special features that CLENE builds into the home study programs that have been found to spell success in the development and use of home study courses are summarized in the following:

1. The learner is able to participate actively in the program and not be a passive recipient only

2. Means of continuous evaluation are built into the program as the course proceeds, for the participant, for the educators preparing the course, and for the educators administering the courses.

3. Each course is developed by a "faculty" of experts, with the guidance of specialty groups.

4. For each course CLENE develops teaching materials and individualized methods of delivery. Teaching materials prepared by the faculty of national experts include:

    a. study letters sent to participants at regular intervals; these study letters, often accompanied by other materials, are intended to draw the participants out of a purely receptive position, activate them, and make them partners with CLENE in the learning process
    b. syllabi and books
    c. programmed instruction
    d. slides and film strips
    e. video tapes
    f. motion picture films
    g. other modes of instruction, such as cable technology satellite technology

5. The individual participant is encouraged to organize voluntary study circles for participants living in the same area and to use a library as a media center to exchange the learning potential that the individual gains from the home curriculum. This is a suggestion put forth by one of the mini-charette groups.

One of the most effective techniques in making home study courses effective is the use of the study letter, often accompanied by other materials, which is sent to the participants at regular intervals (usually monthly). The following features about study letters have been found to add significantly to the students' motivation in completing the courses and in keeping their interest high throughout:

1. An attempt is made to use the practitioners' experiences and to help them to assess these experiences problematically and critically

2. The aim of the approach is more effective library and information service -- by giving information about the latest stand in specialist discussion, the development and use of new technology, innovative library and information science practices

3. Models for tansferring the studied material into library and information center practice in a didactic and methodical way

4. Participants are encouraged to try out these suggestions in their own library and information center situation and synopses of their reported experiences are produced and sent to other participants

5. Certain types of work and tests (self-administered) are corrected by CLENE

6. Games are developed in cooperation with persons having the necessary expertise; these games would elicit the kind of behavior sought to successfully improve identified competencies

There are many advantages to home study, one of the chief advantages being that it fulfills the demand for equality of educational opportunity. It enables practitioners to correct previously neglected decisions about continuing in more depth or along more demanding lines. The demand for further education and continual relaying of information to all practitioners in any professional sector and to all those interested is simply a utopia without home study. The professional mobility typical of modern society demands a form of study that complements existing educational systems at all levels. At the same time, the opportunity for comparing professional experience and the theorization of that experience are provided to an extent that is generally not provided in existing institutions. Rebel (1970, p. 71) maintains that:

> ...the type of study employed by home study at least partially enables a reduction in the cultural lag to take place in the sphere of education, since it offers courses, developed by teams of experts, in new areas of study and on new subjects, methods, processes, and so on to any number of people...

The widespread and rapid surge in the use of home-study education is, in part, explained by Wedemeyer (1969) who points out that this mode has pioneered in two important aspects:

1. In proving that learning does not have to conform to place-time limitations imposed by teachers and institutions
2. In making opportunity to learn available by self selection, not institutional, economic, geographic, or class determinants

Because of these and other attributes, home study can and will undoubtedly play an increasingly important and dynamic role in continuing education, especially when linked with other independent study methods made possible by the use of new technology, such as cable and satellite technology. The writers of this report recommend that the Administrative Board of CLENE give early and serious consideration to the use of home-study courses for library and information science personnel.

An example of combining a self-study course in a tutorial environment is provided by the Lister Hill Center of the National Library of Medicine. In the learning resource center, one or more tutorial centers are fully equipped with all the audio-visual aids needed for the individual student to study the prepared course syllabi. These include models of parts of the body covered in the syllabus, taped lectures, microscopes and slides, television screen for use of a prepared video-tape, cassettes, diagrams, charts, and two or three basic reference tools referred to in the syllabus. The students proceed through the syllabus at their own time and pace, using a wide array of instructional aids. Pre- and post-tests are also provided for students to measure their learning. The suggestion here is that CLENE experiment with the development of tutorial centers of this type in a few libraries that indicate they would be interested in developing such a concept on a pilot basis.

Audio-Cassette Tapes

Audio-cassettes are another method of learning that, although widely used in other professions, were not rated by respondents in this study very highly. Although cassettes were ranked fourth with respect to use in a list of 27 methods by the complete sample respondents, of the 68 percent of respondents using them, only 23 percent rated them as most effective (see Tables 26-28 in Appendix B).

The reason for this may be that audio-cassette tapes have not been produced in high priority need areas and that delivery systems have not been developed, or if developed, are not widely known. Other professions, especially engineering, architecture, medicine, and business have found the audio-cassette tapes a popular means of updating, as they can be used at a time and place suited to an individual's own schedule, such as in an auto while driving. A survey of the literature shows that two of the most popular types of generally self-supported updating provided on cassettes are knowledge packages and literature updates.

A "knowledge package" is a cassette designed to produce in-depth information on some new concept. An example would be cable technology and its potential use by a library. Knowledge cassettes are often accompanied by an outline, diagrams, charts, or examples of documents (such as a program budget) to make the content clearer. Sometimes cassettes are keyed to slides, where the concept might be improved by means of visual aids, or sometimes they are keyed to programmed texts and tests.

Another type that has been found popular (and self supporting) in other professions is a monthly "update in literature." For example, in architecture, on a monthly basis, cassettes are produced that review about 75 periodicals in related disciplines as well as architecture. Material found in the periodicals is ranked in order of current priorities, based on needs assessment studies, and pertinent articles related to the current priorities are abstracted.

Task Forces for High Priorities such as Technology Competency Development

As need arises, the Administrative Board identifies problem areas or areas of high priority need that it feels deserve special attention, and giving emphasis to meeting those needs, appoints special task forces to work on them. One special task force, for example, was suggested earlier on recognition and reward systems for continuing education.

The data from the questionnaire survey instruments of the present study indicate that another area that might be recommended to the Board for receiving the special kind of attention that a special task force would give it is that of developing competency in the use of available technology. Table 26 (in Appendix B) shows that methods of continuing education using technologies such as dial access and cable TV were least often provided by the respondent organizations. The development of technology competency by CLENE is based on the realization that an incomprehensively rapid growth of technology necessitates updating the knowledge of library personnel in order for them to give optimal quality service to their publics; and that, according to the Bureau of Labor's survey of future trends in librarianship, every type of library will demand greater and greater competency in effective use of the new media.

The task force would give special attention to the ways and means of training both those who work with continuing education programs and those individuals engaged in continuing education, so that instructional materials and strategies would coincide with the current state of what is possible in instruction through the use of educational technology. The task force might recommend to the Administrative Board that special studies be carried out, for example, or that a feasibility study on the use of satellite communications technology as a means of further delivering continuing education to the states be undertaken.

The special task force on technology utilization might recommend the development of technology competency through the use of sponsored traveling demonstration workshops, or through the use of CLENE's headquarters as the gathering point or depository of examples of the use of the new technology.

Demonstration worshops would provide participants the opportunity to improve their skills in using new technologies, and would include think tank sessions on innovative uses of the new technologies in relation to furthering both continuing library and information science education, and the quality of services provided to library and information science publics by the use of new technologies. These workshops would be scheduled in different sections of the country in locations where the use of advanced technologies could be observed in use in practical ways. For example, the Astral Program Advancement to Continuing Health Education (APACHE) Project (Fryman, 1974, pp. 45-48) in San Antonio, Texas, uses satellite technology for the advancement of continuing education at the University of Texas Health Science Center.

The national office of CLENE could serve as a gathering point for depository of information on new technologies, with demonstrations, model training packages, and descriptions of innovative uses of new technologies in continuing education. An example of this type of demonstration continuously updated on a grand scale is provided by the Educational Facilities Center in Chicago.

PROCESS FOUR: COMMUNICATIONS AND DELIVERY PROCESS

The Communications and Delivery Process has two main functions for which it is responsible:

1. To stimulate an awareness of the importance of and need for continuing library and information science education

2. To devise and develop procedures for assuring distribution of quality continuing education materials for all library and information science personnel who wish to continue a lifetime of learning

In relation to the first of these functions, the Communications and Delivery Process publishes state-of-the-art papers that are prepared for meetings of the CLENE Assembly; it also gives wide visability to the ideas presented at the Assembly, particularly to any recommendations that the Assemblypersons make to the Steering Committee or to the profession at large.

The Communications and Delivery Process also carries out the role of stimulating an awareness of and sense of need for continuing library and information science education by a number of publications. The four listed here are suggestive of the type of publication that the Communications and Delivery Process might recommend to the Administrative Board for implementation.

Continuing Library and Information Science Education Update. This newsletter contains future announcements of what is being sponsored; lists programs and resources available from CLENE; includes directory information on programs and resources not produced by CLENE that are repeated at schedule intervals (such as sixth-year Post-MLS offerings in library schools); gives brief report identifying new organizations and recent research in continuing education at an interdisciplinary level; and gives new bibliographical lists in the field of continuing education covering all professions and disciplines. Update is the communication link that keeps the Assemblypersons in touch with what is going on between Assembly meetings. It is sent to all Assemblypersons and to subscribers.

Innovative Program Reviews. The Resource and Development Process periodically publishes fairly detailed reports on unique ideas, concepts, methods, or modes used in continuing education, not only in library and information science but in other fields as well. It includes, where possible, a cost analysis of each innovative program reported upon. Also included are abstracts of new, ongoing, and recent research at an interdisciplinary level in continuing and adult education. The publication is a bonus that comes with membership in CLENE.

Perspectives on High Priority Problems. This publication features pros and cons on high priority problems identified by the Needs Assessment and Problem Description Process and at meetings of the CLENE Assembly, and presents alternatives that have been suggested from the field and from other disciplines. Its purpose is to increase awareness of priority problems throughout the nation so that local and other continuing education committees may have an opportunity to react and offer solutions. The publication is a bonus that comes with membership in CLENE.

Landmark Statements. When the CLENE Assembly, Steering Committee, or Administrative Board issue statements or guidelines of nationwide importance, these are printed for dissemination. CLENE also publishes landmark statements formulated by other associations and groups concerning continuing education. For example, in January of 1972, the Association of American Library Schools (AALS) adopted a position paper on Continuing Library Education that was far reaching in its scope. AALS not only recommended actions it should take in this field, but outlined suggestions for a nationwide plan for continuing education involving a partnership of all relevant groups. CLENE disseminates position papers such as this.

With regard to the second function, the Communications and Delivery Process is responsible for designing a communications system and delivery pathways assuring library personnel of all levels and organizations engaged in continuing education activities equal access to quality continuing education materials. It also has responsibility for actively encouraging awareness, interest, evaluation, and use of programs and resources available if the overall mission of improving library service in its broadest sense is to be realized.

Research by Havelock (1969), Rogers (1971), and Meyers (1969) in the area of utilization of knowledge and innovations (the word "innovation" is used in such a way as to denote an individual or group perception of something being new, regardless of its objective newness) clearly indicates that certain conditions have to obtain if programs and resources, regardless of how high quality they may be, are to be used by the publics for which they are designed, rather than lying idle and dormant. A few key concepts are summarized here as they provide the rationale for the manner in which the Communications and Delivery Process carries out its activities.

Havelock (1969, pp. 7-34) argues that the utilization of knowledge requires organization (structure) of acquisition, synthesis, dissemination, and liaison activities. Structure is needed to assure the description of users' needs and problems, maintenance of viable linkages between resources and users, and coordination of scarce resources on a few high priority problems to avoid overloading the system with too many complex problems. Havelock's conclusions are substantiated by data collected in the present study in which respondents suggested there must be continuous needs assessment involving as many people as possible in the process; that a network should be in operation so that there would be a free flowing of ideas; and that any nationwide program would have to concentrate, at least at the start, limited resources on a few high priority problems identified through the Needs Assessment and Problem Definition Process.

Havelock also insists that knowledge utilization is given greater probability of success where there is an opportunity for face-to-face (two-way) communication; that the knowledge utilization processes require candidness between senders and receivers, and that both senders and receivers perceive the message(s) to be relevant. These general guidelines are consistent with the ideas of respondents in this study who emphasized that there should be active participation by as many people as possible at local, state, regional, and national levels and that all levels of library personnel should be involved, and that the system should strive in every way possible to give individuals the feeling that their needs are of concern to the system and are taken into account in planning and development of programs and resources.

Rogers (1971, pp. 138, 145, 154, 155) is also relevant to the Communications and Delivery Process as he has identified in his research five attributes new ideas and programs (innovations) must have if they are to be adopted and used. They are:

1. Relative advantage -- degree to which an innovation is perceived as being better than the idea it supersedes

2. Compatibility -- degree to which an innovation is perceived as consistent with existing values, past experiences, and the needs of receivers

3. Complexity -- degree to which an innovation is perceived as relatively difficult to understand and use

4. Trialability -- degree to which an innovation may be experimented with on a limited basis

5. Observability -- degree to which the results of an innovation are visible to others

Rogers' (1971, p. 103) concepts about the knowledge utilization process place primary emphasis for use on the receiver group. He identifies four basic stages in the process leading to use of knowledge. The first stage is to become exposed to the existence of new knowledge or innovation and become aware of how it operates. The second is to form a favorable attitude toward it. The third stage is to engage in activities leading to a decision whether to accept or reject it. The fourth is to receive reinforcement for the decision to use it. (This social interaction perspective provides a case for planning communications to assure awareness, interest, evaluation, and adoption.)

Myers (1969, p. 31) concludes from his research that three-fourths of innovations used were in response to demand based on recognition of a need or a problem. This finding is certainly in keeping with the heavy emphasis throughout the data obtained in this study on identifying needs and problems. Using the findings from these various studies as important variables to integrate into the Communications and Distribution system, it seems warranted to recommend to the Administrative Board that the Communications and Delivery Process of CLENE should work to:

1. Actively encourage awareness, interest, evaluation, and adoption of new programs and resources

2. Actively and continuously relate the needs and problems identified through participation by as many people as possible to the Communications and Delivery Process, paying special attention to high priority needs and demands

3. Establish a balance with respect to the use of interpersonal (two-way) communication channels and mass-media communication channels

Growing out of these concepts, the Communications and Delivery Process of CLENE plans its work to be carried out in four basic stages:

1. Encourage awareness of programs and resources -- both those developed by CLENE and those originating in the field that are available for distribution through CLENE. In this stage special attention is given to distributing summaries of programs and resources through newsletters (both Update as distributed by CLENE and newsletters of component groups concerned with continuing library and information science education), direct mass mailings, and presentations at national conferences and meetings.

2. Encourage interest in programs and resources through interpersonal (two-way) communications. In this stage special attention is given to direct person-to-person mailings, participation in regional or state seminars, and distribution of more detailed information about programs or resources to Linkage Agents, local committee chairpersons, state council chairpersons, regional persons responsible for continuing education, and those responsible for continuing education development in all member organizations and groups.

3. Encourage use (adoption) of programs and resources through direct (two-way) interpersonal communications and by mass (one-way) communications reporting on ways in which programs and resources are being used by others at the present time.

4. Solicit feedback through direct (two-way) communications giving an evaluation of offerings and forwarding such data to the Program and Resource Development Process to improve future programs.

In addition to being linked to the Needs Assessment and Problem Description Process and the Program and Resource Development Process, the Communications and Delivery Process is linked to the Information Acquisition and Coordination Process. When a query is made of the information system and materials are identified, the user of the information system can simply request that those materials be delivered and the request will be transmitted to the appropriate source, whether it is the CLENE Communications and Delivery Process, a regional center, an office of a national association, or a commercial publisher. An example of the way in which the Communications and Delivery Process functions is provided in the first section of Chapter 4.

SUMMARY OF THE CONTINUING LIBRARY EDUCATION NETWORK AND EXCHANGE

Summary

This Chapter has presented the basic recommendation of the Project, which is to create a working partnership among all component groups concerned with continuing library and information science education. The partnership is The Continuing Library Education Network and Exchange (CLENE) which is a service and resource facility designed for all levels of personnel in the library and information science field. The operating goal of this model is the improvement of library and information service for the nation.

The model incorporates those elements identified in the research as necessary for building a successful nationwide program. Within the philosophy underlying the model, the basic missions of CLENE are:

1. To provide equal access to continuing education opportunities, available in sufficient quantity and quality over a substantial period of time to ensure library and information science personnel and organizations the competency to delivery quality library and information service to all

2. To create an awareness and a sense of need for continuing education of library personnel on the part of employers and individuals as a means of responding to societal and technological change

The recommended organizational components of CLENE are an Assembly, a Steering Committee, an Administrative Board, a Panel of Review and Evaluation, a CLENE Executive Director, and a small central staff which carries out the main Processes of CLENE and continuously serves as an exchange and resource facility for individual library personnel and for component groups who are members.

The acronym "CLENE" (The Continuing Library Education Network and Exchange) implies both the processes and the people needed to accomplish the goals set forth. The NETWORK aspect of CLENE refers to those people who serve as representatives of the library community at large. The EXCHANGE aspects of CLENE are the processes needed to carry out the established goals.

The various sources of information utilized by the Project team indicated four clusters of activities, or Processes, to be essential for a nationwide system of continuing library and information science education. They are: needs assessment and problem definition, information acquisition and coordination, program and resource development, and communications and delivery.

The Needs Assessment and Problem Definition Process is aimed at continuous assessment of individual and group needs and encourages library personnel at the local, state, regional, and national levels to participate in deciding what their needs are and how they will learn. This Process is necessary in order to assure the relevance and direction of the other three Processes.

The Information Acquisition and Coordination Process acquires, processes, stores, retrieves and exchanges information about existing continuing education resources in library and information science and other professions that are applicable to common needs and problems.

The Program and Resource Development Process performs the planning, design, production, and evaluation of CLENE services.

The Communications and Delivery Process creates an awareness and sense of need for continuing education of library personnel on the part of employers and individuals; plans ways and means to deliver the materials to the users who need them; and plans activities to encourage awareness, interest and adoption of CLENE programs and services.

These four basic Processes establish a relatively simple and workable model.

A summary of the CLENE model is presented in Figure 3.2. It attempts to give a picture of the total concept of CLENE by showing

1. What needs to be done -- the four Processes of CLENE
2. Who needs to be involved -- individuals, state agencies, associations, libraries, information centers, library schools, interest groups

CLENE

What Needs To Be Done (Processes)	*Who Needs To Be Involved*
Needs Assessment and Problem Definition Information Acquisition and Coördination Program and Resource Development Communications and Delivery	Individuals Associations State Agencies Library Schools Libraries Information Centers Interest Groups

How CLENE Initiates, Supports, and Facilitates Its Getting Done	
Functions	*Part of CLENE Responsible*
Planning and Policy	Assembly Steering Committee Administrative Board
Implementation	Director and Staff
Evaluation	Panel of Review

Schema of Continuing Library Education Network and Exchange -- CLENE

Ultimate Goal - Quality Library and Information Service

Figure 3.2

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and showing how CLENE initiates, supports, and facilitates getting it done by

1. the planning and policy-making responsibility -- provided by the organizational structure of CLENE
2. the implementation -- carried out by the Director and Staff
3. the evaluation -- carried out by the Panel of Review and Evaluation.

CHAPTER 4

IMPLEMENTATION PLANS

This Chapter presents recommendations for initiating the Continuing Library and Information Network and Exchange model described in the preceding Chapter. It also suggests alternative institutional environments and alternative financial policies for CLENE.

RECOMMENDATIONS AND ALTERNATIVES FOR INITIATING CLENE -- SHORT RANGE PLANS

ACTIVITY PLAN FOR INITIATION OF CLENE

In the description of the Communications and Delivery Process of CLENE, a dissemination activity plan was suggested for the delivery of programs and resources. The plan suggested is based on recent findings in the area of knowledge utilization theory which suggest that to be effective, dissemination plans should include:

1. Programs balanced with respect to one-way (mass media) and two-way (interpersonal) communication channels
2. Activities staged to encourage awareness, interest, evaluation and adoption
3. Programs tailored to several target audiences such as key leaders in professional associations, administrative personnel, operating personnel, technical personnel, legislative bodies, educators, etc.

Generally there should be a shift from mass media (one-way) channels to interpersonal (two-way) channels as the dissemination plan objectives move from awareness to adoption. It is recommended that this approach be used in initating CLENE.

Stage 1

The first stage works to encourage widespread awareness of the purpose and nature of the Continuing Library Education Network and Exchange (CLENE). The primary communication channel for encouraging awareness are the mass media channels.

Immediately after the report is accepted by the Commission, it is recommended that copies of the "Summary Report" be duplicated in sufficient quantities for immediate and wide distribution as specified in item numbers two through four below.

1. Distribute extracts from the "Summary Report" and information about the nature and origin of CLENE via news releases, mass mailings, and newsletters to the library and information science community at large and to publications in other disciplines concerned with continuing education.

2. Distribute the "Summary Report" to the key leaders of the concerned groups involved in continuing library and information science education, including: the Council of State Librarians, the state library associations, the Association of American Library Schools, regional library associations, national associations, individual library schools, and other concerned groups. Accompany the "Summary Report" with a letter asking recipients to consider carefully what implementation would mean in terms of their own activities and programs.

3. Distribute the "Summary Report" with a news article to the periodicals in library and information science and related fields, including the publications of the groups listed in Item #2.

4. Distribute the "Summary Report" to special groups, such as a sampling of all types of libraries, members of the A L.A. Legislative Network, the Division of Libraries and Learning Resources of the U.S. Office of Education, to the members of the Staff Development Committee, Personnel Section, Library Administration Division of A.L.A., the Continuing Education Committee of the Association of American Library Schools, to each state which is a member of the Education Commission of the States (ECS) and to the national headquarters of the Education Commission of the States.

With each "Summary Report" information on how the recipient can obtain the full report is included.

It is suggested that a one page questionnaire be addressed to key leaders of various groups, listed under Item #2 above. Questions such as the following might be asked:

1. Do you endorse the overall concept of a Continuing Library Education Network and Exchange which serves as a resource and service facility for continuing library and information science education on a nationwide basis?

2. Do you wish a copy of the full report? [Indicate manner in which this may be obtained.]

3. Do you plan to have a meeting of your group to discuss CLENE and its operations for your group? Do you wish any materials or resource persons to help in this presentation?

Stage 2

The second stage works to encourage interest in CLENE by distributing the full report via direct mail on a demand basis. The report would be made available to those organizations and individuals referred to above for the costs related to reproduction, collating, binding, and mailing, or if the document is printed, for the cost of publication. The important consideration in relation to Stage 2 is that immediately after the report is received and approved copies should be made available so that they can be sent out immediately as soon as requests come in.

Stage 3

The third stage works toward the evaluation of CLENE by encouraging groups to hold meetings to discuss CLENE leading to some type of statement regarding it as related to their group. A packet of resource materials including the "Summary Report" is sent to each group indicating a plan to hold a meeting on CLENE. It is recommended that groups meeting during the July,1974,A.L.A. meetings be encouraged to hold such discussions as part of their programs in New York City.

It is important that each group meeting be encouraged to make a statement following the discussion indicating what implementation of CLENE would mean to their group and whether they would endorse it and to what degree. Each group would be asked to answer a one-page questionnaire (previously prepared) indicating if they would be willing to contribute to the financial support of CLENE and how much they would be willing to contribute. In other words each group meeting on CLENE should lead to some type of action.

The groundwork has already been laid for such meetings. The Project team made presentations to solicit ideas about the development of a nationwide plan to a number of these groups during the 1974 Midwinter meetings of A.L.A. It is important to keep the interest alive that was stimulated at that time. The fact that interest does exist is apparent by the number of letters and phone calls that have come to the Project team requesting information about the progress of the Project and the date the report would be available to them, and what they can do to start implementation of the recommendations made in the report.

Those groups not meeting during the July 1974 A.L.A. convention could be encouraged to hold meetings during the summer and fall to consider CLENE. State agencies which do not have a long range plan for continuing education might be encouraged to form a representative committee to develop a long range statewide plan for continuing library and information science education. Local meetings, with a wide representation of all levels of library and information science personnel, as well as users, and other representatives of other disciplines should be encouraged to forward ideas into the statewide planning committee. For suggestions, in this direction see Chapter 3, Section entitled "Rationale for Proposed Organizational Structure."

In order for the meetings in which CLENE is discussed to be as productive as possible, the "Summary Report" should be widely distributed before the meetings are held. This is one reason for the urgency in getting the "Summary Report" duplicated and mailed as soon as possible.

For all those groups which indicate that they would like someone to come to their meeting to help make the presentation, a representative (such as a member of the Project team or Advisory Board) should be sent to serve as a resource person for the discussion or program on CLENE.

In addition, at the A.L.A. meeting in July 1974, it is recommended that the National Commission report to as wide an audience as possible the major recommendations of the report; the implications the report has, not only for library and information science personnel, but for every resident of the country; and the action the Commission has taken and proposes to take relative to the report.

Stage 4

The fourth stage works to encourage the adoption of CLENE as a viable entity and provides for implementation. The effectiveness of Stage 4 will depend to a high degree on the extent to which Stages 1, 2, and 3 have been implemented.

It is recommended that the motivation for this action be provided by the National Commission's calling a two- or three-day national assembly of key groups and individuals for a planning conference and, if a concensus can be reached, for the implementation of the CLENE structure..

The invitation to the groups might suggest that they appoint those members already in the Continuing Library Education Network (CLEN)*, as they have been involved in the development of the plan. Those groups which have not joined the CLEN network are invited to appoint a delegate at this time to represent them at the conclave. In addition, some representatives from groups in the related fields of media and adult and continuing education, such as the National Education Association and the Association for Education and Technology, are invited to attend without vote. Representatives from the U. S. Office of Education and other branches of the federal government are invited to attend without vote. The invitation states that each official delegate has liaison responsibility with the group represented, but speaks and acts from a personal perspective in any decisions taken by the Assembly.

Delegates chosen by their respective groups to attend the conclave are sent a copy of the proposed nationwide plan in advance to study and discuss with the groups they represent before the conclave meets. At the conclave, workshop or think-tank sessions are set up to consider the CLENE model.

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* Members invited to join CLEN include: library schools accredited by ALA, library programs in colleges and universities not accredited by ALA, state library agencies, national, regional, and state library association, individuals representing employing libraries or agencies concerned about continuing education, and directors of the regional offices of the Library and Learning Resources of the U. S. Office of Education.

Specific elements to consider for inclusion in the Assembly's agenda include:

1. An overview of the CLENE model

2. Description of activities relative to CLENE up to the time of the Assembly

3. Workshops or think-tank groups to discuss the model and what the groups represented are willing to do toward its implementation; formulation of recommendations that groups might wish to make to the whole Assembly. Each workshop group would have at least one person present to serve as a resource person, who is knowledgeable on the background, mission, goals, processes and proposed structure of CLENE

4. Bringing to the full Assembly the ideas expressed in the various workshops and the provision of time for recommendations that any groups might wish to make to the Assembly

5. The election of a Steering Committee which considers:

    a. basic policy formation
    b. conditions of membership
    c. conditions of sponsorship
    d. election of an Advisory Board

6. Meeting of the Advisory Board

    a. empower an interim staff for carrying out Exchange Functions
    b. develop long range financial policies; decide on immediate first steps relative to funding

7. For delegates to the Assembly not elected to the Steering Committee or the Advisory Board, provide workshop sessions on key issues previously identified and on which papers are presented. One issue strongly identified as a key issue in this study, for example, that would seem a candidate for such a workshop meeting is "recognition for continuing education." If workshops are held on key issues it is suggested that five or six be held which would be repeated in the morning and afternoon and each assemblyperson would be invited to attend two workshops. The ideas expressed would be summed up from the two workshops on each subject and presented to the whole Assembly.

8. Following the conference, the proceedings are published including actions of implementation, as well as formal papers presented,and summaries of the workshop discussions.

9. The actions and papers presented at the conference would be widely distributed by means of news releases, mass mails, and newsletters to the library and information science community at large.

Stage 5

The fifth stage is the preparation of a CLENE performance critique on the initiation of the CLENE program in order to improve future CLENE communication and delivery efforts.

Performance statistics are collected as the plan for initiation of CLENE progresses by maintaining accurate financial records, maintaining accurate dissemination records, soliciting feedback from each stage of the dissemination plan, and culminating with a performance analysis, including recommendations for future CLENE communication and delivery programs.

The inclusion of this stage is important because it sets a pattern and precedent for soliciting feedback and implementing a performance evaluation of the subsequent programs and activities of CLENE. In fact, the overall five-stage plan for initiating CLENE can serve as a pilot test program for the activities suggested in the model relative to the Communications and Delivery Process.

RESPONSIBILITY FOR CARRYING OUT THE STAGES OF INITIATION OF CLENE

Four alternatives are presented relative to the carrying out of these recommendations for the initiation of CLENE.

First Alternative

In the first alternative the National Commission plays a catalyst role by serving as a stimulus for action. The Commission has made a major contribution to the library and information science community by granting funding for the design of a nationwide plan for continuing education. It has played a catalytic role in this respect. Now, in order for its contribution to the field to be fully realized, the Commission should serve as a motivating force to give stature and importance to the product it has made possible.

In suggesting that the Commission take responsibility for the steps of initiation of CLENE, the Project Team [and this is reflected in the opinions of many of the participants in the study] feels that this could be an excellent opportunity for the Commission to provide needed leadership for the field without taking a role that might be construed as operational.

To the Project Team, this prospective role seems to parallel the one the Commission has taken in relation to its white paper on "A New National Program of Library and Information Science." CLENE provides an opportunity for the Commission to demonstrate that it is deeply concerned about the development of human resources in the library and information science community as well as in the development of vital information resources and networks. Also, CLENE provides the means by which library and information science personnel can gain the expertise to effectively implement the Commission's "New National Program."

It is the belief of the Project team that the activities described in stages one through four would provide a framework and setting which would enable leaders within the profession to accept the challenge and to carry forward with CLENE as a united partnership; and, that without the Commission's initial action, this might not be as easily accomplished.

The advantages of this alternative are several: (1) action would be immediate -- a criterion called for by many participants in the study; (2) it would involve a large number of people quickly; (3) it would closely follow the action pattern suggested by a group of library educators and administrators meeting at a Leadership Training Institute sponsored by the Division of Libraries and Learning Resources in May 1974; and (4) it would put the Commission in a role of catalyst-facilitator that would enable a Project it started to be implemented.

Second Alternative

In the second alternative, which was proposed by one of the interviewees in the the study, the National Commission would also play a catalytic role, but one which would parallel the role it has taken up to this point regarding the present Project. The Commission would issue a call for a proposal for an individual or a coalition of groups to initiate CLENE, using the stages suggested in the preceding paragraphs or presenting any other plan for initiating CLENE that the Commission might deem more effective. A disadvantage of this plan is that by the time a call for a proposal was issued and action started, a minimum of two months would have elapsed.

Third Alternative

A third alternative would involve the Commission's taking only two actions relative to the report: (1) disseminating the report and the summary, or popularized versions of these, widely throughout the library and information science community; and (2) setting up a national conclave of key groups and individuals to consider the continuing education model, CLENE. This conclave, or assembly, could create a special planning committee to develop proposals for the initiation of CLENE.

Fourth Alternative

A fourth alternative would involve the Commission's taking only one action -- widely disseminating the report and summary (or popularized versions of them) throughout the library and information science community in the hope that a coalition of support groups might rise up and assume a leadership role in implementing CLENE and carry out the stages of initiation.

Certain risks are involved in this alternative that need to be considered: (1) no one may "rise up and assume leadership" and nothing will evolve by way of initiation or implementation of a nationwide plan for continuing library and information science education; (2) one group may assume leadership but not build a coalition of groups in a partnership relationship; (3) more than one group may decide separately to assume such a leadership role and the result would be a splintered effort which would not lead to the accomplishment of the goals and objectives projected for CLENE.

An advantage that might arise from this position is that one group might decide to take the leadership role in getting CLENE initiated (following steps similar to those outlined in items one through four), raising money to support implementation and making adequate provision at every step of the way for gathering support from the other component groups that should be involved in sharing the responsibility for all the elements of CLENE.

ALTERNATIVE PLANS FOR THE CONTINUING SUPPORT OF CLENE -- LONG RANGE PLANS

ALTERNATIVE INSTITUTIONAL ENVIRONMENTS

CLENE requires an institutional environment that is compatible with and has a linking relationship with local, state, regional, and national associations and organizations concerned with continuing library and information science education as well as with employing libraries and individuals. CLENE could conceivably be implemented in one of the general institutional environments included in that partnership, namely a major university, a federal government agency, a state government, a regional library organization, or a private corporation. These five alternatives are reviewed below and presented in summary form in Figure 4.1.

Description of Alternatives

First, CLENE could be implemented in a university environment. The university environment appears to be a good candidate because universities represent a primary resource for adult and continuing education, technological expertise, and research. In addition, centralized services are available, such as payroll, accounting, and duplication.

Although interviewees indicated they thought library schools should be among those institutions having continuing responsibility in the area of continuing library education, only one believed that a library school might be the best institutional home for a nationwide plan for continuing library and information science education. Furthermore, the university institutional environment has several key disadvantages, including: strict membership requirements for access to group knowledge; limited accountability in terms of contribution to society and productivity measurement in terms of publications relative to continuing education; a record in the area of continuing library education that is perceived by the profession as limited in scope and lacking innovation; and the lack of constant input from practitioners served by continuing education programs.

Second, CLENE could be implemented in a federal government agency environment. The federal government agency environment appears to be a logical candidate because the Federal government represents federal wealth, status and power. However, the Federal government environment has several basic limitations: a relatively medium past record for continuing education in the library and information science field; evidence of decreasing funding for continuing education; and a strong vested interest in existing federal programs and priorities.

OPTIONS	ADVANTAGES	CONSTRAINTS
1. University	• Primary resource for expertise • Staff and resources to conduct research • Experience in setting of standards	• Low credibility with other groups for doing job • Strict membership requirement for access to group knowledge • Limited accountability in terms of contribution to society • Medium record with past programs in continuing education
2. Federal government	• Centralized wealth • Power • Continuity (of some agencies) • Status	• Low credibility with some of other groups • Medium records with past programs in continuing education • Strong vested interest in existing federal programs • Evidence of decreased funding for continuing education • Represents strong centralized control to some
3. State governments	• Would assure familiarity with state (and local and regional) problems • Federal library funds allotted to states • State agencies could work closely with local continuing education committees • Federal revenue sharing with states and local governments necessitates increased activity on part of states to secure appropriate shares of such funds	• Do not have strong record in continuing education up to this time • Limited resources • Difficulties of interstate financing • Difficulty of securing funds for membership fees
4. Library association	• Organized structure into which CLENE could fit • Communication channels already established • Status	• Lack of funds and personnel • Medium past record in continuing education • One group not fully acceptable to all groups
5. Private Corporate Environment	• Motivated to produce products and services on competitive basis	• Lack of credibility of performance by some of the participating groups

Figure 4.1 Alternative Institutional Environments for CLENE

Third, CLENE could be implemented in a state government environment. The state environment appears to be a strong candidate because it would assure familiarity with state and local problems within the state. It also has a degree of credibility with state and local residents and has means of maintaining direct channels of communication with local grassroots groups. Also, it has maintained a balanced record in providing continuing education to all levels of library personnel, including trustees (see Table 12 in Appendix B). Furthermore, the largest number of interviewees' responses relative to responsibility for continuing education placed prime responsibility at the state level.

However, the state government environment has several constraints, such as a spotty current record in providing a balanced continuing library and information science education program for all types of libraries. Only 46 percent of the 38 state library agencies who participated in the questionnaire survey, for example, indicated they had one specific person or persons with special responsibility in the area of continuing education (see Table 2.2 in Appendix B). Other constraints are the difficulties of interstate financing and of obtaining state funds for membership fees for national programs.

Fourth, CLENE could be implemented in a professional association environment. The association environment appears to be a strong candidate because association members are already presumably concerned with furthering their continuing education. Moreover, a continuing education effort could be neatly incorporated into existing organization structure. The association already has provisions for communication channels to all of its membership, and several interviewees believed that CLENE would gain status by being affiliated with an association or a group of associations.

An association environment, however, has several key disadvantages. While nine interviewees suggested an association as an institutional home for CLENE (the American Library Association was the most frequently mentioned), ten expressed strong opposition to this concept. Also, library associations are at the moment severely restricted in their funds, and it seems unlikely to many of the interviewees that they would be willing or able to divert large amounts of time or money to furthering a nationwide plan for continuing education. Then too, associations generally do not have a strong record for deep, continuing concern about providing continuing education opportunities for their memberships.

Fifth, CLENE could be implemented in a private corporate environment. The private enterprise environment appears to be a strong candidate because private corporations are motivated by survival to produce competitive products and services. However, the private enterprise motivation sometimes tends to reduce credibility among those being served.

Criteria for Selecting an Alternative

CLENE should be implemented in an institutional environment that combines as many of the best features of the environments reviewed as possible. To assure quality, acceptance, and functionality, CLENE should be implemented in an environment with the following characteristics:

- a corporate charter to work for the collective benefit of all those served
- a private enterprise drive to survive by producing programs and services that are bought because they are of high quality
- a national status that is widely recognized by all groups involved in the partnership
- a collectively financed program with funds contributed by local and state governments, federal agencies, associations, employers of library and information science personnel, private institutions, and individuals.
- provision for a close working relationship with the people providing continuing education at the local level and those served at the local level
- purposes such that CLENE would be in Section 501(c)(3) of the Internal Revenue Code of 1954 and so recognized by the Internal Revenue Service so that it could obtain funds from foundations and individuals tax free

It is assumed that wherever the institutional home would be that there would be provision for direct liaison with local, county, and state governments; liaison with federal government agencies, universities, foundations, associations, and employing libraries and individuals; and that general administrative services such as marketing, accounting, and legal advice would be available.

Recommended Alternative

Taking all these factors into consideration, it is recommended that CLENE be organized as a non-profit corporation, and that in the articles of incorporation under the general not-for-profit corporation act, its purposes include such objectives as:

1. Identifying needs for continuing library and information science education
2. Developing and carrying out programs of continuing library and information science education
3. Engaging in the promotion, development and study of the field of continuing library and information science education
4. Developing evaluation strategies appropriate for continuing library and information science education
5. Studying the effectiveness of methods and techniques in continuing library and information science education
6. Encouraging an interdisciplinary approach to continuing library and information science education
7. Encouraging innovation in continuing library and information science education
8. Developing models of continuing library and information science education
9. Studying the preconditions for learning among adult learners

It is interesting to note that in the interviews, ten respondents talked about the advantages of a non-profit, separate corporation -- although before this project was undertaken, the Project team was not aware that anyone had been thinking in these terms.

Alternative Suggestions for Housing CLENE

If CLENE is a non-profit corporation, there are still several options available. One is that even as a separate corporation, CLENE could be housed in the quarters of a library association such as the American Library Association. Reactions from the field showed that some questionnaire and interview respondents were very much in favor of such an arrangement; others were quite opposed.

A second option is that CLENE be housed in a building dedicated to continuing education among the professions. Three such possibilities are located in the Chicago area.

Educational Facilities Center. The first possibility is the Educational Facilities Center (EFC), under the direction of George D. Fischer, Chairman of the Board and a past-president of the National Education Association. The Center is presently constructing a specially designed, 34 floor building, at 444 North Michigan Avenue, across from the Chicago Tribune Building. EFC has taken an innovative stance solving many problems facing today's educators by housing, in one location, education consultants to advise on major issues ranging from individualized instruction to facilities planning. They have also created a center where innovative programs, materials, equipment, furnishings and systems can be examined under one roof. Eight floors of the new building will feature ultra-modern conference and meeting rooms, lounges and an auditorium. Several floors will be available for rental to professional associations; space might easily be rented to house CLENE.

The advantages are the availability of a staff of design artists, layout specialists etc. for production needs; duplicating services; eight floors of meeting rooms; and a large number of consulting educational technologists. In addition, this major exposition and service center can help meet one of the objectives of CLENE -- development of educational technology know-how and competencies. Another advantage is its location in a building where other professional continuing education groups will be housed. A disadvantage is, that although EFC will eventually represent every level of education in its facilities, currently it concentrates primarily on the elementary level of education.

American Medical Association Continuing Education Facility. Another possibility discovered by the Project interviewers was the fact that the American Medical Association is considering erecting in a prime location a building devoted to continuing education for a number of professions. This facility would also have meeting rooms, a core of publication specialists, duplicating services, etc.

Institute for Continuing Professional Education, Incorporated. A third possibility is affiliation with a non-profit corporation entitled The Institute for Continuing Professional Education, Incorporated, an organization of professional groups concentrating on improvement of continuing education activities. One advantage of this Institute is that its tax status falls under Section 501 (c) (3), so that other groups that affiliate with it do not have to go through the lengthy procedure of establishing this tax status and funding efforts can be started immediately.

Each of the professional associations has at least one Fellow represented on the Board of Trustees of the Institute, and to emphasize the interdisciplinary character of the organization, one Fellow from another profession is represented at the Board meetings of all member groups. At the present time the Institute has no physical headquarters, but is negotiationing for such a center, possibly in the Educational Facilities Center, mentioned previously.

The Institute was formed to encourage an interdisciplinary approach to continuing education for the professions. It was founded on the belief that no discipline or profession by itself is able to muster sufficient resources to identify or solve the human problems of modern society. The Institute serves as a catalyst for collaborative research, a forum for the exchange of experience and information, and a stimulus for programs and innovations in the field of continuing professional education. The objectives of the Institute are in harmony with those of CLENE.

Technology Information Exchange. Another option for housing CLENE that warrants further investigation is The Technology Information Exchange of Public Technology, Incorporated, in Washington, D.C. Public Technology Incorporated is the research and development arm of The International City Management Association, Council of State Governments, National Association of Counties, National Governors' Conference, National League of Cities, and the U. S. Conference of Mayors. Public Technology Incorporated has formed a Technology Information Exchange with initial funding from the National Science Foundation to encourage the diffusion of innovative technology among city, county, and state governments; or between these governments and private enterprise, federal agencies, universities, foundations, or associations. Before discussing the possibie advantages or disadvantages of housing in this environment, two terms need defining: (1) "innovative" is used by the Technology Information Exchange to denote an individual or group perception of something being new, regardless of its objective newness; (2) "technology" is used to mean the systematic treatment of ideas, concepts, methods, and procedures for use in practical applications.

The thrust of the Technology Information Exchange is that there should be financial support for solving problems identified at the grassroots level by means of information acquisition, product assembly, and technology dissemination.

From a broad perspective, many of the problems identified as needing solving could be greatly aided in their solution by means of help from library and information science personnel. Also, the processes that have been implemented at the Technology Information Exchange to provide nationwide help to cities, counties, and state governments parallel the same type of services that CLENE proposes to provide to library and information science personnel at the same levels.

A case can be made for the fact that when sources of funds are analyzed, roughly 75 percent of the salaries of library personnel are derived from city, county, state, or Federal government. Private schools, private colleges and universities, and private corporations are the chief agencies employing library personnel which do not get their monies from government funding at some level. Therefore, a logical argument is that the same patterns that have been established for serving the Technology Information Exchange could be expanded and enlarged to include funding for the objectives of CLENE.

A possible disadvantage could be that Technology Information Exchange is already organized and functioning and that CLENE activities involving extensive grassroots participation at every level might tend to be lessened. However, each of the six member groups of Public Technology is an autonomous group carrying its activities as it sees fit; theoretically, CLENE could do the same. Advantages are, that as in the case of other environmental homes, there are administrative services, such as a bank of design artists and editors, on location. There is also a library and information center.

These are but representative examples of possible housing options that were encountered by the Project team during the interviews conducted for the study. A concentrated effort aimed at seeking housing possibilities would undoubtedly discover many other options.

ALTERNATIVE FINANCIAL POLICIES

The writers recommend that CLENE operate with a **flexible financial** policy based on funding from a number of sources that is a compromise between the two extremes suggested by respondents. At one extreme is the suggestion of total funding by the Federal government, with the U. S. Office of Education and the National Science Foundation mentioned most often. The other extreme suggested is complete reliance on funds received from sale of products and resources. The Project team recommends that a flexible financial policy somewhere in between these two extremes be considered.

Although CLENE cannot expect federal funding over a long time span (because legislators expect new programs to demonstrate a capacity to survive long term without direct federal funds), it is hoped that either the Federal government, a private foundation (Carnegie or Kellogg were most often suggested by the respondents), or state library agencies could be persuaded to make grants to launch CLENE and to give it the vital stimulus needed to get it started on a sound basis.

It would be possible for CLENE to adopt a financial policy that requires complete dependence on the income from its products and services, but such a policy would seriously hinder any program with as wide a scope as CLENE. The four Processes suggested for CLENE[1] require a considerable amount of time to diffuse complex ideas, concepts, procedures and methods. Furthermore, it will take CLENE several years to build up the expertise and teamwork required to handle these complex processes.

CLENE should, therefore, have a flexible, long-range financial policy which depends on a fixed amount of Federal government monies, private foundation demonstration dollars, or state library agency funding for the first few years, and which gradually shifts the financial burden to sales of publications, programs and services, membership fees from sponsors and subscribers, and project contracts or grants. The long-range financial policy should include solicitation of funds from a mix of local and state governments, federal government agencies, library and information science associations, private foundations, employing libraries, and individuals.

In the long run, if CLENE is to be assured a secure future, its services should be perceived as so valuable in meeting the library and information science needs of the resident population of each community serviced that the main and continuing source of support is from local, county, and state funds.

One of the most important first steps toward putting CLENE on a solid basis early in its existence is that of obtaining membership fees on a budget ratio from associations and organizations. It is exceedingly important to get a high ratio of support as soon as possible even if it might only be a token payment to start with. Once a high ratio of members has been established, Federal and foundation funding will be easier. The distinctions between types of membership dues should be decided early. Organizations, for example, might be sponsors; individuals, subscribers. Because of the wide difference in the size and budgets of library and information science associations and of employing libraries, fees for this type of sponsor should be based on a fixed percentage of the association's or organization's total budget.

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[1] These are described in Chapter 3, under the heading "The Processes of CLENE." They are: Needs Assessment and Problem Definition, Information Acquisition and Coordination, Program and Resource Development, and Communications and Delivery.

Another important concept is to get as wide support as possible for CLENE. Product people, library suppliers, and publishers should be solicited for support as sponsors. Another source of income from this category of private industry would be that used in the Educational Facilities Center. There, suppliers of products in the area of educational technology have a floor on which they can rent booths to display their products. Each exhibitor designs a display which can be studied by interested parties, and if further information is desired, one may use a touch tone telephone system and a special identification number to order the materials requested sent to one's home.

With the increasing emphasis on the part of state legislatures on accountability for professional services, it appears that states will rapidly be developing legislation requiring continuing education for all professionals, such as has already been proposed in Iowa. This will also mean that state funds available for continuing education among the professions will be increasing. To ensure that library and information science personnel may be adequately included in such funding, state planning committees for continuing library and information science education should work closely from the inception of CLENE with the legislative network that has been established on a statewide and nationwide basis by the American Library Association.

Anther potential source of funding for CLENE is the proposed bill (HR 7998) presented to the 93rd Congress, designed "to provide for the establishment of the National Professions Foundation to promote progress in the professions, and for other purposes." (U.S. Congress, 1973) Recognizing that the nation's problems are characterized by a demand for multiprofessional solutions, it "proposes a National Endowment for the Professions and a National Council on the Professions." For purposes of this Act the term "professions" means those occupations "which require specialized knowledge and preparation, which maintain high standards of achievement and conduct, and which render a public service."

It has been found in the continuing education development in other professions that a key factor in getting early support for continuing education plans is to have products and services that meet established needs available as soon as possible. The four Processes of CLENE constitute a monumental challenge for any organization and it would be impossible to expect immediate implementation of all of these Processes at once, or instantaneous delivery on any or all of those services. It is therefore suggested that a flexible management system be worked out within the CLENE staff enabling the talent assembled within CLENE, with the aid of the expertise of consultative help, to apply their initial energies to: (1) setting in motion the activities necessary for continuous needs assessment and problem definition, starting at the grassroots level (as described under the description of the Needs Assessment and Problem Definition section of Chapter 3); and (2) designing and developing programs and services to meet a few high priority needs uniformly identified by recent research.

Planning and implementation relative to the Program and Resource Development Process would be started on two levels. The first level develops a precise description of those programs, services, and materials already available and functional in meeting the needs of library and information science personnel that meet established criteria. These would be publicized for distribution through CLENE publications. The second level develops, with consultative help, program specifications for those services, resources, and materials that are not available but that should be provided. Concurrently, as data is accumulated from the Needs Assessment and Problem Definition Process, efforts would be made to delineate alternative ways of moving from "what is" to that which "should be" to the end that programs, services, and materials in identified high-priority areas would be produced for distribution as soon as possible on a continuing basis.

SUMMARY AND CONCLUSIONS

This Chapter has discussed short range plans for the initiation of CLENE and alternative ways of carrying these out. It has also presented alternative long-range plans for the continuing support of CLENE. The primary conclusions are presented here.

- The Continuing Library Education Network and Exchange (CLENE) should be initiated by means of dissemination activities which incorporate three concepts: (1) a balance with respect to one-way (mass media) and two-way (interpersonal) communication channels; (2) a series of activities staged to encourage awareness, interest, evaluation, and adoption of CLENE; (3) programs tailored to meet several target audiences.

- Four alternatives are presented for carrying out the stages suggested for the initiation of CLENE. Each involves a different degree of involvement by the National Commission of Libraries and Information Science, but in each instance the Commission is cast in a catalyst role.

- A major organizational issue that needs to be resolved in the initial stages of planning is the institutional environment for the operation of CLENE. The study team considered these alternatives: a university environment, a federal agency environment, a state government environment, a professional association environment, and a private corporate environment. The conclusion of the study is that to assure quality, acceptance, and functionality, CLENE should be implemented as a non-profit corporation with the following characteristics:

  - a corporate charter to work for the collective benefit of all those served

  - a private enterprise drive to survive by producing programs and services that are purchased because they are of high quality

  - a national status that is widely recognized by all groups involved in the partnership

  - a collectively financed program with funds contributed by local and state governments, federal agencies, associations, employers of library and information science personnel, and private institutions

  - provision for a close working relationship with the people providing continuing education at the local level and those served at the local level

  - purposes such that CLENE would be in the Section 501 (c) (3) of the Internal Revenue Code of 1954 and so recognized by the Internal Revenue Service so that it could obtain funds from foundations and individuals tax free.

It is assumed that in this arrangement there would be provision for: direct liaison with local, county, and state governments; liaison with federal government agencies, universities, foundations, associations, employing libraries, and individuals; and general administrative services such as marketing, accounting, and legal advice.

- Another implementation issue discussed is that of housing for CLENE. Five specific possibilities discovered by the Project team during the interviews for the study are presented. Selection of one of these, or others, depends upon the criteria established as most important, whether it be for high potential for innovation and demonstration; for prestigious tradition; for quickness and already established tax structure; for interdisciplinary possibilities; for closeness of ties with state and local government.

- Another major implementation issues concerns the financial resources and policies that will allow successful operation of CLENE. Although CLENE cannot expect federal funding over a long time span, it is hoped that either the Federal government, a private foundation, or state agencies could be persuaded to provide the seed money to launch the organization and to give it the vital stimulus needed to get it started on a sound basis. CLENE should have a flexible collectively financed policy which depends on a fixed amount from the Federal government, a private foundation or state agency demonstration dollars for the first few years, and which gradually shifts the financial burden to sales of publications, programs, and services; membership fees from sponsors and subscribers; and project contracts or grants. The long-range financial policy should include soliciation of funds from a mix of local and state governments, federal government agencies, library and information science associations, employing libraries, and individuals.

- CLENE will be assured of a secure future if its services are perceived as so valuable in meeting the library and information science needs of the resident population of each community that the main and continuing source of support will be from the use of its services and resources.

The concluding statement of this study is presented as the "Introduction", preceding Chapter I. Summed up, the overall conclusions are three:

- that a nationwide Continuing Education Network and Exchange to serve library and information science personnel is both feasible and practical
- that a nationwide Continuing Education Network and Exchange is absolutely essential in order to achieve the goal of providing equal access to continuing education opportunities, available in sufficient quantity and quality over a substantial period of time to ensure library and information science personnel and organizations the competency to deliver quality library and information service to all
- that a Continuing Education Network and Exchange is necessary to create a nationwide awareness and a sense of need for continuing education of library personnel on the part of employers and individuals as a means of responding to societal and technological change

APPENDIX A

SURVEY INSTRUMENTS

GRADUATE DEPARTMENT
OF LIBRARY SCIENCE

(202) 635-5085

THE CATHOLIC
UNIVERSITY
OF AMERICA
WASHINGTON D.C. 20017

October 12, 1973

Dear Colleague:

An issue of vital importance to all of us in the library and information science field is -- "How can continuing education opportunities be made easily available to all library and information science personnel who need and wish to continue a lifetime of learning?"

A project directed to answer this question is sponsored by The National Commission on Libraries and Information Science. It is being conducted at the Graduate Department of Library Science of The Catholic University of America with the cooperation of an Advisory Board (listed on Enclosure A).

We are asking you, as a person with responsibility for continuing education programs, to assist us in this venture by completing and returning the enclosed questionnaire, which we estimate will take about one hour of your time.

Purpose of the Project:
Our goal is to develop recommendations for a nationwide blueprint for continuing education that will: (1) embrace the continuing education of both professionals and paraprofessionals in library and information science, (2) insure quality content of the educational experience, and (3) involve all levels of institutions.

We will be getting ideas and information from 250 questionnaires (sent to state, regional, and national library associations, state and national libraries, and schools of library and information science, as well as employing libraries); 50 interviews with educators, administrators and working professionals; and small group "idea sessions."

Why Your Participation is Important:
Any nationwide blueprint for continuing library education will be successful only if it involves the people who have responsibility for continuing education programs. We are gathering information about what currently exists, but, also, we want your ideas on what should be. This blueprint can be successful only if it has your support, and builds on your achievements, experience and planning.

By completing and returning the questionnaire within the next week, you will have an important role in determining the future development of continuing education in our profession. Upon completion of the project (Spring 1974) we will send you a summary of our findings and recommendations.

Instructions:
On page one of the questionnaire, we have written in the name of the organization for which we would like you to respond. Please answer the questionnaire from the point of view listed below for your particular organization:

1. Employing library or library system: Answer in reference to the library and information science personnel employed in your organization.

2. Library association: Answer in reference to members of your association, but not employees of the association.

3. Library schools: Answer in reference to the library and information science personnel for whom you are providing continuing education programs, but not in reference to your faculty.

4. State libraries: Answer in reference to the library and information science personnel for whom you are providing continuing education, but not in reference to your employees.

Please return the completed questionnaire in the enclosed self-addressed, stamped envelope. Individual responses to the questionnaire will be confidential.

Thank you very much for joining with other leaders in sharing your thinking with us about continuing education -- an issue of such importance that the Commission chose it as one of only three areas in which it is sponsoring study.

Cordially yours,

Betty Stone
Elizabeth W. Stone, Ph.D.
Project Director and Chairman of the Department

Ruth Patrick
Ruth J. Patrick, Ph.D.
Associate Project Director

Barbara Conroy
Barbara Conroy
Research Associate

Enclosures:
A. Advisory Board List
Questionnaire
Return Envelope

ENCLOSURE A: LIST OF ADVISORY BOARD MEMBERS CONTINUING LIBRARY AND INFORMATION SCIENCE EDUCATION PROJECT

Frank R. Birmingham
Program Leader
Instructional Media and Technology
Mankato State College
Mankato, Minnesota

Frank Kurt Cylke, Chief
Division of the Blind and
Physically Handicapped
Library of Congress
Washington, D.C.

Dorothy F. Deininger, Chairman
Association of American Library
Schools - Committee on
Continuing Education
Associate Professor
Graduate School of Library Service
Rutgers University
New Brunswick, New Jersey

Jack S. Ellenberger, Head
Law Library
Covington and Burling
Washington, D.C.

Edward G. Holley, President-Elect
American Library Association
Dean, School of Library Science
University of North Carolina
Chapel Hill, North Carolina

H. Robert Malinowsky
Chairman of the Education Committee
Special Libraries Association
Assistant Director of Libraries
University of Kansas Libraries
Lawrence, Kansas

Allie Beth Martin, Director
Tulsa City/County Library
Tulsa, Oklahoma

Nettie B. Taylor
Assistant State Superintendent
for Libraries
Division of Library Development
and Services
Maryland State Department of
Education
Baltimore, Maryland

Julie A. Virgo
Director of Medical Library Education
Medical Library Association
Chicago, Illinois

Duane Webster, Director
Office of University Library
Management Studies
Association of Research Libraries
Washington, D.C.

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A-4
Expiration Date: March 1974

Office of Management and Budget No. 174S 73002

CONTINUING LIBRARY AND INFORMATION SCIENCE EDUCATION PROJECT

(SPONSORED BY THE NATIONAL COMMISSION ON LIBRARIES AND INFORMATION SCIENCE)

Conducted by
THE DEPARTMENT OF LIBRARY SCIENCE
THE CATHOLIC UNIVERSITY OF AMERICA

OUTLINE OF THE QUESTIONNAIRE

So that you may have an overall view of the major areas touched upon in the questionnaire, the following outline is presented:

Background information (about responding organization)
Some definitions
I. **Concepts** about continuing education
II. Continuing education for **target groups**
III. Provision of **policies** on continuing education
IV. **Modes** of continuing education
V. **Methods** of continuing education
VI. Means of providing **recognition** for continuing education
VII. **Your ideas and proposals for action**

BACKGROUND INFORMATION (about responding organization)

1. Name of person completing questionnaire: ______________________________

2. Title: ______________________________

3. Name of organization for which you are completing questionnaire: ______________________________

____

4. Telephone: ____________________

5. Does your organization have one specific person or group that has special responsibility in the area of continuing education?

☐ **YES** ☐ **NO**

If YES, what is the title of this person or group?

____

6. Please describe the groups toward which your continuing education programs are currently directed? (Check ☑ the boxes that apply.)

a. **By Geographic Area:**
   - ☐ National
   - ☐ Regional (over several states)
   - ☐ State
   - ☐ Regional (within one state)
   - ☐ Local
   - ☐ Other (Please specify)

   ____

b. **By Type of Library Personnel:**
   - ☐ Academic
   - ☐ Public
   - ☐ School
   - ☐ Special
   - ☐ Information Center
   - ☐ Other (Please specify)

   ____

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To aid you in completing this questionnaire, and to facilitate uniformity of response, please read this definition sheet for some of the key terms used in this project.

Some Definitions (As Used In This Project)

- **Continuing Education** is defined as that education which the individual perceives will enhance his or her total job competence. (Data for a more detailed operational definition of continuing education will be collected in this questionnaire.)

- **Categories of Library and Information Science Personnel.** (Applies to Sections II, III, and VI of this questionnaire.) To show the relationship of key terms as used in this study, the following chart is presented to help you in filling out the questionnaire. (Unless otherwise noted, the source of these definitions is the ALA Manpower Statement.)

CATEGORIES OF LIBRARY PERSONNEL	
Professional	Supportive
1. **Librarian** (with MLS degree).	4. **Paraprofessional** (Library Associate) has a bachelor's degree. Supportive responsibilities at a high level, normally working within the established procedures and techniques, and with some supervision by a professional.
2. **Operating Librarian** (without MLS degree) but performing some jobs categorized as carrying professional responsibilities, including those of management which require independent judgment. (Project Advisory Board)	5. **Library Technician** (Technical Assistant) has at least two years of college level study OR post-secondary school training in relevant skills. Tasks performed are supportive to Paraprofessionals (Library Associates) and higher ranks, following established rules and procedures.
3. **Technical Information Specialist** (without MLS) fills positions involving work concerned with analyzing and transmitting the intellectual content of scientific, technological or other specialized information, including foreign language specializations (U. S. Civil Service Commission GS 1412 series.)	6. **Clerk** has business school or commercial courses supplemented by in-service training or on-the-job experience.
Trustee. The term *Trustee* is used broadly to include members of library boards or advisory library committees in universities and special libraries.	

- **Modes of Continuing Education.** (Applies to Sections III and IV of this questionnaire.) (Several of the modes that can be defined in several ways are defined here as we are using them in this project.)

Conference. A formal meeting of the representatives of a group for the purpose of discussion and deliberation.

Educational Leave. A period of time granted to a person for academic study.

Institute. An instructional program (for a short or long period of time) set up for a special group interested in some type of specialized library activity.

Invited Conference. A bringing together of *experts* in a subject for the purpose of presenting papers for discussion and/or talking over their latest research results or problems being currently investigated.

Sabbatical Leaves. A period of time granted to a person for updating, research, etc.

Seminar. A meeting for giving and discussing information, for an exchange of ideas in some area.

Tutorial. A class in which a tutor gives intensive instruction in some subject to one or a small number of students.

Workshop. A course or discussion group which emphasizes the exchange of ideas and the demonstration of methods and practical application of skills and principles mainly for adults employed in the field.

I. CONCEPTS ABOUT CONTINUING EDUCATION

A. An Operational Definition of Continuing Education (CE)

In order to arrive at an operational definition of continuing education in library and information science, **we seek your judgments.**

In Column 1, check [✓] those phrases that you agree should or should not be incorporated into an operative definition for continuing library education.

In Column 2, **rank the top five** phrases checked *"YES"* in Column 1 (items 1-12) that you think should be included (let 1 = the highest priority).

DEFINITION COMPONENTS	Column 1 Should Apply		Column 2
	YES	NO	Rank Order of the Top 5 "YES" Items in Col. 1 (Items 1-12)
• Generally Accepted in Other Professions:			
1. CE involves educational activities which are beyond **those normally considered necessary for entrance into the field.**			
2. CE applies only to education which will enhance the **individual's competence for the job** now held or aspired to in the near future.			
3. CE implies a notion of **lifelong learning** as a means of keeping an individual up-to-date with new knowledge. It prevents obsolescence.			
4. CE assumes that the **individual** carries the basic responsibility for his own development.			
5. CE includes **updating** a person's education (e.g., makes an individual's education comparable to that of a person receiving a like degree at the present time).			
6. CE includes the **"refresher"** objective (e.g., the review of once familiar material to sharpen up the skills and knowledge once had).			
7. CE allows for **diversification to a new area within a field** (e.g., supervisory and management training).			
• Excluded by Some Professions:			
8. CE includes **upgrading** a person's education (e.g., a person may work toward a higher degree which raises the level of his formal capabilities).			
9. CE allows for **diversification to a new field** (e.g., a person educated in one field may seek to obtain some formal education in another field).			
10. CE allows for **broadening a person's education** (e.g., a person educated in one field may add a new perspective in his field such as the study of political science or sociology as it is related to his own field).			
11. CE should include **training** which is planned and provided by the employing organization to further the organization's goals.			
12. CE is provided for **all personnel,** professional and supportive.			

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I. CONCEPTS ABOUT CONTINUING EDUCATION (CE) (Continued)

B. Some Ways in which Concepts about Continuing Education are Implemented in Organizations

1. How high a **priority** does continuing education have in your organization in relation to other objectives; and how high a priority do you think it should have in relation to other objectives? (Please check ☑ the boxes that apply.)

	High	Medium	Low	None	Don't Know
Is now:	☐	☐	☐	☐	☐
What it should be:	☐	☐	☐	☐	☐

2. If you think continuing education should have a higher priority in your organization than it does now, what are the **forces against** its having a higher priority?

☐ 1. Budget constraints
☐ 2. Organizational structure
☐ 3. Tenure
☐ 4. Present accreditation standards for library schools which do not encourage CE
☐ 5. Lack of positive attitude of library directors
☐ 6. Lack of positive attitude of supervisors
☐ 7. Lack of positive attitude of management
☐ 8. Other matters seem more pressing
☐ 9. Other (Please specify) ____________________

3. How much money did your organization spend on continuing education programs during your last fiscal year?

$ ________________
☐ Don't Know

4. What percentage of your organization's budget was this?

________________%
☐ Don't Know

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5. Please check ☑ how continuing education programs and activities are presently funded in your organization:

☐ 1. Organization budget
☐ 2. Grants -- Federal gov't.
☐ 3. Grants -- Local gov't.
☐ 4. Grants -- State gov't.
☐ 5. Grants -- Foundations
☐ 6. Registration fees
☐ 7. Tuition
☐ 8. Membership dues
☐ 9. Contributions
☐ 10. Other (Please specify) ____________________

6. In providing continuing education, does your organization need assistance for any of the following:

☐ 1. Determination of needs of target groups
☐ 2. Design of CE programs
☐ 3. Development of CE programs
☐ 4. Publicity
☐ 5. Packaged CE programs (developed by someone else)
☐ 6. Distribution of programs or packages produced.
☐ 7. Evaluation of effectiveness of CE programs
☐ 8. Consultation with knowledgeable persons in the field
☐ 9. Clearinghouse of information on available CE opportunities
☐ 10. A directory of CE opportunities
☐ 11. A quality journal on continuing library and information science education
☐ 12. Other (Please specify) ____________________

II. CONTINUING EDUCATION (CE) FOR TARGET GROUPS (See page 2 for definitions of groups.)

Please follow the instructions at the top of each column.

A. Opportunities and Priorities

TARGET GROUPS	Column 1	Column 2	Column 3
	Check in the boxes below the groups **you serve or employ.**	Check in the boxes below the groups for which your organization **provides CE opportunities.**	Rank all the groups (1-10) **in order of the priority** for CE you think they **should** receive on a nation wide basis over the next 3-5 years. (1=highest priority)
• PROFESSIONAL PERSONNEL			
1. Librarians (With MLS or more)			
2. Operating Librarians (Without MLS)			
3. Technical Information Specialists (Without MLS)			
4. Other (Please specify)			
• SUPPORTING PERSONNEL			
5. Paraprofessionals (Library Associates)			
6. Library Technicians (Technical Assistants)			
7. Clericals			
8. Other (Please specify)			
• OTHER			
9. Trustees			
10. Other (Please specify)			

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II. CONTINUING EDUCATION (CE) FOR TARGET GROUPS (Continued)

B. Needs

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TARGET GROUPS	Column 1 For each group, what continuing education needs do you feel are either not being met or are being met poorly **currently**?
PROFESSIONAL PERSONNEL	
1. Librarians (With MLS or more)	
2. Operating Librarians (Without MLS)	
3. Technical Information Specialists (Without MLS)	
4. Other (Please specify)	
SUPPORTING PERSONNEL	
5. Paraprofessionals (Library Associates)	
6. Library Technicians (Technical Assistants)	
7. Clericals	
8. Other (Please specify)	
OTHER	
9. Trustees	
10. Other (Please specify)	

II. CONTINUING EDUCATION (CE) FOR TARGET GROUPS (Continued)

B. **Needs** (Continued)

TARGET GROUPS	Column 2 For each group, what specific content areas of continuing education do you feel have the highest priority over the **next three to five years?** (e.g., library automation, administration and management, media, human relations, etc.)
• PROFESSIONAL PERSONNEL	
1. Librarians (With MLS or more)	
2. Operating Librarians (Without MLS)	
3. Technical Information Specialists (Without MLS)	
4. Other (Please specify)	
• SUPPORTING PERSONNEL	
5. Paraprofessional (Library Associates)	
6. Library Technicians (Technical Assistants)	
7. Clericals	
8. Other (Please specify)	
• OTHER	
9. Trustees	
10. Other (Please specify)	

(End of Question II.)

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III. PROVISIONS OF POLICIES ON CONTINUING EDUCATION (CE) (See page 2 for definitions of groups and modes.)

1. Please check [✓] in the applicable boxes, the policies you think that employing libraries **should provide** for each target group:

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CONTINUING EDUCATION POLICIES	TARGET GROUPS				
	Professionals	Paraprofessionals	Library Technicians	Clericals	Trustees
A. TUITION FOR:					
1. Courses taken for credit					
2. Courses taken for credit, but only if job related					
3. Non-credit courses					
4. Non-credit courses, but only if job related					
5. Institutes, workshops, seminars, tutorials					
6. Other (Specify)					
B. LEAVES OF ABSENCE:					
7. Educational leaves without pay					
8. Educational leaves with pay					
9. Sabbatical leaves with full pay					
10. Sabbatical leaves with partial pay					
11. Other (Specify)					
C. TIME OFF TO ATTEND:					
12. Annual professional conference					
13. Professional meetings					
14. Committee or task force meetings of professional associations					
15. Classes					
16. Workshops, institutes, seminars, tutorials					
17. Other (Specify)					
D. CE REQUIREMENTS:					
18. CE work is required for promotion					
19. CE work is required for salary increase					
E. EXPENSES (TRAVEL AND/OR PER DIEM) PAID TO:					
20. At least one professional conference annually					
21. Professional meetings if participant in program or committee					
22. Institutes					
23. Workshops, seminars, tutorials					
24. Other (Specify)					
F. PROVISION FOR:					
25. In-house lectures, seminars, conferences					
26. In-house workshops on specific topics					
27. Discussions with outside consultants					
28. Staff development or CE committee to participate in planning and governance of the opportunities provided					
29. In-house planning by specific groups on CE					
30. Systematic means of discovering CE needs					
31. Other (Specify)					

III. PROVISION OF POLICIES ON CONTINUING EDUCATION (CE) (Continued)

2. This question is to be answered only by those answering from the point of view of an **EMPLOYING LIBRARY, OR LIBRARY SYSTEM:**

Does your organization currently have written policies for CE provisions for library personnel?

(a) ☐ YES ☐ NO

If NO, does your organization make provisions for CE, even though there is no written policy?

(b) ☐ YES ☐ NO

3. This question is to be answered only by those answering from the point of view of (1) **a LIBRARY ASSOCIATION,** (2) **a LIBRARY SCHOOL**, or (3) a **STATE LIBRARY**:

Does your organization promote the importance of the idea that employing libraries or library systems should have written statements describing their policies for CE?

☐ YES ☐ NO

4. To what extent do you believe policies for continuing educational assistance (of the types mentioned on the preceding page) motivate those for whom you provide continuing education to undertake further education?

☐ strongly motivating factors
☐ moderately motivating factors
☐ slightly motivating factors
☐ do not motivate

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(End of Question III.)

IV. MODES OF CONTINUING EDUCATION (CE) (See page 2 for definitions of modes.)

Please follow the instructions at the top of each column.

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MODES	Column 1		Column 2	Column 3
	Did your organization **use or provide** any of these modes of CE during the past year? (Please check [✓] the boxes that apply.)		For the items checked "YES" in Column 1, check the **5 modes you found most effective** in increasing the competency of individuals. (Items 1-27)	For the items checked "NO" in Column 1, check the modes you did not use or provide but that **you would have liked to have used or provided.**
	YES	NO		
A. COURSE WORK MODES				
1. University credit courses open to the practitioner but designed for the degree-seeking student				
2. University credit courses specifically designed for the continuing education student				
3. Short intensive courses with or without credit, sponsored by University, and/or library association				
4. Institutes				
5. Workshops				
6. Non-credit, employer sponsored courses				
7. Travelling programs				
B. INTERACTION MODES				
8. Attending professional meeting and/or conferences				
9. Participation in professional committees or task force groups				
10. Invited conferences (groups of experts)				
11. Internships				
12. In-house lectures followed by discussion				
13. In-house all day staff meetings				

IV. MODES OF CONTINUING EDUCATION (CE) (Continued)

Please follow the instructions at the top of each column.

BEST COPY AVAILABLE

	Column 1		Column 2	Column 3
MODES	Did your organization **use or provide** any of these modes of CE during the past year? (Please check [✓] the boxes that apply)		For the items checked "YES" in Column 1, check the **5 modes** you **found most effective** in increasing the competency of individuals. (Items 1-27)	For the items checked "NO" in Column 1, check the modes you did not use or provide but that **you would have liked to have used or provided.**
	YES	NO		
B. INTERACTION MODES (cont'd)				
14. Sabbatical leaves				
15. Educational leaves				
C. SELF TEACHING MODES				
16. Oral or written informal reports by those who have attended conferences, seminars, etc.				
17. Time for reading journals, report literature, books on-the-job				
18. Provision of reading lists				
19. Provision of information through a selective dissemination system				
20. Participation in grass roots seminars or "invisible colleges"				
21. Teaching others				
22. Writing papers for publication				
23. Research				
24. Packaged courses				
25. Provision of materials for home study				
26. Correspondence courses				
27. Use of continuing education center				

(End of Question IV.)

V. METHODS OF CONTINUING EDUCATION (CE)

Please follow the instructions at the top of each column.

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METHODS	Column 1 Did your organization **use or provide** any of these methods of CE during the past year? (Please check [✓] the boxes that apply.)		Column 2 For the items checked "YES" in Column 1, check the **5 methods you found most effective** in increasing the competency of individuals. (Items 1-28)	Column 3 For the items checked "NO" in Column 1, check the methods you did not use or provide, but that **you would have liked to have used or provided.**
	YES	NO		
A. USE OF AUDIO VISUAL MATERIALS AND EQUIPMENT				
1. 8 mm film loops				
2. 16 mm films				
3. Slides				
4. Cassettes				
5. Video tapes				
6. Classroom TV				
7. Closed circuit TV				
8. Talk-back cable TV coupled with programmed self-learning texts				
9. Cable TV				
10. Dial access learning centers				
B. PROGRAMMED INSTRUCTION				
11. Individual prescribed instruction (IPI)				
12. Computer-assisted instruction (CAI)				
13. Programmed self-learning texts				

(Continued on next page.)

V. **METHODS OF CONTINUING EDUCATION (CE)** (Continued)

Please follow the instructions at the top of each column.

BEST COPY AVAILABLE

METHODS	Column 1		Column 2	Column 3
	Did your organization **use or provide** any of these methods of CE during the past year? (Please check [✓] the boxes that apply.)		For the items checked "YES" in Column 1, check the **5 methods** you **found most effective** in increasing the competency of individuals. (Items 1-28)	For the items checked "NO" in Column 1, check the methods you did not use or provide but that **you would have liked to have used or provided.**
	YES	NO		
C. **SIMULATION**				
14. The case method				
15. Incident-Method (Incident-Process technique)				
Management games				
17. Simulation exercises				
18. Role playing				
19. In-Basket exercises				
20. Laboratory education				
D. **OTHER METHODS**				
21. The lecture				
22. Discussion				
23. Classroom meetings				
24. Practicum				
25. Field study trips				
26. Sensitivity training				
27. Systematic observation				
F. **METHODS NOT LISTED ABOVE**				
28. (Please specify)				

(End of Question V.)

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VI. MEANS OF PROVIDING RECOGNITION FOR CONTINUING EDUCATION (CE)

A. Types of recognition

Please follow the instructions at the top of each column.

	Column 1							Column 2						
	Which of the following types of rewards, recognition, or incentives for continuing education does your organization **provide**? (Check [✓] boxes that apply.)							Which of the following do you think **should be provided** throughout the profession? Check [✓] boxes that apply.)						
	TARGET GROUPS							TARGET GROUPS						
REWARDS RECOGNITION INCENTIVES	All	Professionals	Para-Professionals	Library Technicians	Clericals	Trustees	Others (Specify)	All	Professionals	Para-Professionals	Library Technicians	Clericals	Trustees	Other (Specify)
1. Pay Raises														
2. Promotion														
3. Status Symbols														
4. Creating a Stimulating Job														
5. Job Security														
6. Fringe Benefits														
7. Freedom and Autonomy														
8. Giving Certificate														
9. Giving Nationally Recognized CE Units*														
10. Record of CE Activity kept for each Individual														
11. Other (Specify)														

---

* The Continuing Education Unit (c e u) has been defined by a group of associations interested in the feasibility of a un unit of measurement for non-credit continuing education as follows: Ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction.

VI. MEANS OF PROVIDING RECOGNITION FOR CONTINUING EDUCATION (CE) (Continued)

B. Ways of Implementing Recognition Procedures

1. Has the relative effectiveness of these rewards, recognition or incentives been evaluated in your organization?

   ☐ YES. If YES, please describe how. ☐ NO

2. Have any attempts been made to alter the **climate** of the organization in order to encourage continuing education?

   ☐ YES. If YES, describe what has been done. ☐ NO

3. Have any attempts been made to alter the **organizational structure** to encourage participants in continuing education activities?

   ☐ YES. If YES, describe what has been done. ☐ NO

4. Are you in favor of **certification** as a means of maintaining the competency of library and information science personnel?

   ☐ YES ☐ NO

5. Are you in favor of **re-certification** (renewing certification) as a means of maintaining the competency of library and information science personnel?

   ☐ YES ☐ NO

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(End of Question VI.)

VII. AND LASTLY, YOUR IDEAS AND PROPOSALS FOR ACTION

Think now of the conditions and factors relative to continuing education as a whole in library and information science. John Lorenz has put forth the thesis that society has a right to look to the various professions themselves for effective planning and action in developing opportunities for continuing education. One of the key issues is: How can equal, coordinated, educational opportunities be provided for **all** those who work in libraries and information centers who want to continue a lifetime of learning related to their careers?

You have been selected to develop recommendations for action in order to achieve such an objective. We are asking you to consider and suggest way-out ideas as well as those which seem practical and appropriate for present conditions as you see them. What recommendations would you make that could be incorporated into a blueprint for nationwide continuing library and information science education? (1) What do you think is needed? (2) How do you think it can best be provided for? (3) Who do you think should do it? (e.g., library schools, state libraries, library associations, employing libraries.)

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END OF QUESTIONNAIRE. Thank you.

GRADUATE DEPARTMENT
OF LIBRARY SCIENCE

(202) 635-5085

THE CATHOLIC
UNIVERSITY
OF AMERICA
WASHINGTON D.C. 20017

A-20

We would like to interview you about an issue that is of vital importance to all of us who work in the library and information science fields -- "How can continuing education opportunities be made easily available to all those who need and wish to continue a lifetime of learning?"

A project directed to answer this question is sponsored by the National Commission on Libraries and Information Science. It is being conducted at the Graduate Department of Library Science of The Catholic University of America, with the cooperation of an Advisory Board (listed on Enclosure A).

Purpose of the Project:
Our goal is to develop recommendations for a nationwide blueprint for continuing education that will: (1) embrace the continuing education of both professionals and paraprofessionals in library and information science; (2) insure quality content of the educational experience; and (3) involve all levels of institutions.

We will be getting ideas and information from 250 questionnaires (sent to state, regional and national library associations, state and national libraries, and schools of library and information science, as well as employing libraries); 50 interviews with educators, administrators and working professionals; and small group "idea sessions."

Why Your Participation is Important:
Any nationwide blueprint for continuing library education will be successful only if it involves the people who have responsibility for continuing education programs. We are gathering information about what currently exists, but, also, we want to elicit your ideas on what should be. This blueprint can be successful only if it has your support, and builds on your achievements, experience and planning.

Because you were one of the people highly recommended by our Advisory Board as being informed about, and interested in, continuing education, it is extremely important to the project to have your ideas. By participating in this venture, you will have an important role in determining the future development of continuing education in our profession.

Instructions
We plan to conduct the interviews by telephone or in person, during the months of November, December and January. We estimate that a telephone interview will take about one-half hour, and that the in-person interview about one hour..

Would you please indicate on the enclosed pink form whether or not you will participate, and return that form in the enclosed, self-addressed, stamped envelope. If you agree to participate one of the project team members will contact you to arrange an appointment. In addition, we have enclosed a copy of the Interview Guide containing the major topics on which we plan to get your ideas.

We hope that you will join with other leaders in sharing your thinking with us about continuing education -- an issue of such importance that the Commission chose it as one of only three areas in which it is sponsoring study. Upon completion of the project, Spring 1974, we will send you a summary of our findings and recommendations.

Cordially yours,

Betty Stone
Elizabeth W. Stone, Ph.D.
Project Director and Chairman
of the Department

Ruth Patrick
Ruth J. Patrick, Ph.D.
Associate Project Director

Barbara Conroy
Barbara Conroy
Research Associate

Enclosures:
A. Advisory Board List
Interview Request Form
Interview Guide

CONTINUING LIBRARY AND INFORMATION SCIENCE EDUCATION PROJECT

Sponsored by: The National Commission on Libraries and Information Science

Conducted by: Dr. Elizabeth W. Stone, Project Director, and Chairman, Department of Library Science, The Catholic University of America, Washington, D.C. 20017

INTERVIEW REQUEST FORM

From: ______________________________

* ☐ YES, I will be able to participate

Furthermore: (please check below if any of these three situations are applicable.)
I will be available for an interview during:

1. ☐ The Annual Meeting of the American Society for Information Science, Los Angeles, October 21-25, 1973.
   -- A convenient time and place for me would be ____________________
   ____
2. ☐ The American Library Association Midwinter Meeting, Chicago, January 18-25, 1974.
   A convenient time and place for me would be ____________________
   ____
3. ☐ A forthcoming trip to Washington, D.C.
   -- A convenient time and place for me would be ____________________
   ____

* ☐ NO, I am unable to participate

Telephone number: ______________________
(Area code)

(for interviewee)
INTERVIEW GUIDE

CONTINUING LIBRARY AND INFORMATION SCIENCE EDUCATION PROJECT

Sponsored by: The National Commission on Libraries and Information Science

Conducted by: Department of Library Science, The Catholic University of America
You will be interviewed by:
Project Director, Dr. Elizabeth W. Stone,
Chairman of the Department of Library Science, or
Associate Project Director, Dr. Ruth Patrick, or
Research Associate, Barbara Conroy.

INTERVIEW GUIDE

The purpose of our interviewing you is to get your ideas -- your vision -- about the operational elements of a continuing education program for library and information science personnel throughout the country. What are the alternatives for providing the practitioner with the knowledge, skills, attitudes, and insights that will continue to increase his competency and improve his professional confidence in serving the public?

1. How urgent do you feel the issue of continuing education is for the library and information science field?

2. What are the field's top priorities regarding:
   a. Who needs continuing education opportunities?
   b. What competencies need to be developed?

3. What do you feel should be the articulation between the relevant groups who are now playing a role in continuing education: the library schools, the employing libraries and information centers, the library associations, the state agencies, the individual librarian -- and any other groups that you know are or should be involved and concerned?

4. Thinking in terms of a nationwide blueprint, how would you perceive that the following should be integrated and provided for?
   a. At a national level, what functions do you think would be needed for the blueprint to operate most effectively?
   b. What kind of structure would you envisage that would best provide for these functions?
   c. How should the structure integrate the work of relevant groups playing an active part in continuing education?
   d. In the structure, where should decision-making rest?
   e. How do you think such a nationwide blueprint might be funded?

5. What do you see as the major forces for a nationwide blueprint for continuing library and information science education? What do you see as the major forces against such an approach?

6. Are there any ideas that you haven't had an opportunity to share with us that you think should be considered in making recommendations for the development of a nationwide blueprint that you would like to tell us about?

(for interviewer)

INTERVIEW GUIDE

CONTINUING LIBRARY AND INFORMATION SCIENCE EDUCATION PROJECT

Sponsored by: The National Commission on Libraries and Information Science

Conducted by: Department of Library Science, The Catholic University of America
You will be interviewed by:
Project Director, Dr. Elizabeth W. Stone,
Chairman of the Department of Library Science, or
Associate Project Director, Dr. Ruth Patrick, or
Research Associate, Barbara Conroy

INTERVIEW GUIDE

(Notes to interviewer: Introduce self, explain project objectives and that interviews are confidential and anonymous.)

The purpose of our interviewing you is to get your ideas -- your vision -- about the operational elements of a continuing education program for library and information science personnel throughout the country. What are the alternatives for providing the practitioner with the knowledge, skills, attitudes, and insights that will continue to increase his competency and improve his professional confidence in serving the public?

1. How urgent do you feel the issue of continuing education is for the library and information science field?

2. What are the field's top priorities regarding:
   a. Who needs continuing education opportunities?

PROBE FOR

1. Are continuing education needs the same or different for librarians and information scientists?
2. Do paraprofessionals have a greater need for continuing education than do professionals?

   b. What competencies need to be developed?

PROBE FOR

1. What are the subject areas that are most needed?
2. Do you think these priorities could be met more effectively through a national continuing education program than they are being met today?

3. What do you feel should be the articulation between the relevant groups who are now playing a role in continuing education: the library schools, the employing libraries, the library associations, the state agencies, the individual librarian -- and any other groups that you feel should be concerned and involved?

PROBE FOR

How would you envision that these groups might work cooperatively in the field of CE at a national level?

4. Thinking in terms of a nationwide blueprint, how would you perceive that the following should be integrated or provided for?
   a. At a national level, what functions do you think would be needed for the blueprint to operate most effectively?

PROBE FOR

1. How should needs and resources be continuously assessed?
2. What provision should be made for the assessment and training of library staffs?
3. Research and development ideas
4. Long-range planning
5. Evaluation of:
   a. Products produced by a center
   b. Products received from the field
   c. The individual's performance in continuing education activities
6. The collection of information and programs
7. The assembling of information and programs
8. The distribution of information and programs

   b. What kind of a structure would you envisage that would best provide for these functions?

PROBE FOR

1. Models that they might wish to suggest.
2. How would the structure be formulated to provide for the functions they have listed, such as:
   a. Needs assessment
   b. Research and development
   c. Acquisition of information (programs, etc.)
   d. Publishing, packaging and distribution
   e. Make use of the new technology?
   f. Take full advantage of what is being done in other professions?

   c. How should the structure integrate the work of relevant groups now playing an active part in continuing education?
   d. In the structure where should decision-making rest?
   e. How do you think such a nationwide blueprint should be funded?

5. What do you see as the major forces for a nationwide blueprint for continuing library and information science education? What do you see as the major forces against such an approach?

6. Are there any ideas that you haven't had an opportunity to share with us that you think should be considered in making recommendations for the development of a nationwide blueprint that you would like to tell us about?

PROBE FOR

a. Other people we should contact
b. Other professions they know of that have projects that should be studied
c. Other ongoing projects in the area of continuing education
d. Materials that might be particularly helpful

GRADUATE DEPARTMENT
OF LIBRARY SCIENCE

(202) 635-5085

THE CATHOLIC
UNIVERSITY
OF AMERICA
WASHINGTON D.C. 20017

October 12, 1973

Dear Member of the Continuing Library Education Network (CLEN):

Many of you in CLEN have written or phoned to ask what you personally could do to improve the quality and availability of continuing education efforts in our profession. As a result of the funding of the continuing education project by the National Commission on Libraries and Information Science, we on the project team now have an important and specific way to suggest that you can be of great help in furthering the development of continuing education for librarians and information scientists.

We invite you to join with others in CLEN to organize a local mini-charette.

"Charette" is a term borrowed from architectural and art usage. Literally it means "chariot" or a "little cart." The little carts were used by art students to carry their paintings to Paris. As they moved along the country roads, the farmer, the butcher, the baker, the washwoman and everyone else would suggest improvements -- a little more red here, a little less green there. In other words, everyone got into the act. In architecture, the term has been applied to a marathon designing session (the chariot concept implying the speed of wheels in a race) of architectural teams charged with finishing a project by getting everyone into the brainstorming process.

Today charettes are being used increasingly to open projects as well as to put on finishing touches. In education, the charette is being used to design and implement innovations involving a wide cross section of the community. Whatever the format, the charette has a common feature -- the creation of a "climate of creative combustion" in which all sorts of ideas are freely tested in an informal atmosphere.

In our case, we are using the charette format to get ideas from a wide variety of people you know or have access to who are interested in continuing education both within librarianship and in other professions -- members of library staffs, students, trustees, teachers, business men, educators.

A typical charette is an intensive day and night effort of a week or more in length. The plan suggested here is for one or more daytime or evening sessions -- hence the term mini-charette.

Why, some of you may ask, should CLEN consider such activity? To summarize the feeling of many, continuing education is one of the most -- if not the most -- important problems facing our profession today. It is here and it is not going away by itself. We can't ignore it. We, with the help from other professional groups and citizens, have to start becoming actively involved in building solutions to the problem. Now, the charette may not be the best way of doing something about the solution, but it has the advantage of serving as a continuing education adventure, while at the same time strengthening lines of communication among those concerned about continuing education.

Chiefly, it is a way of obtaining from you in CLEN, and colleagues you may invite to join you in a mini-charette, ideas that you feel would be effective in meeting the goal -- access to continuing library and information science education for all who wish it.

We hope you will venture with us and call together a group to hold a mini-charette as we are doing ourselves here on our campus. Some suggestions that may be helpful are given on the enclosed pages.

We want to be sure to have time to analyze all of your suggestions so that they can be presented to our Advisory Board when it meets in December; so we are calling for your report on your ideas by November 30. Of course, if you want to send them in before that day, we would be delighted. Please return them to:

Dr. Elizabeth W. Stone, Chairman
Department of Library Science
The Catholic University of America
Washington, D.C. 20017

Thank you very much for joining with other leaders in sharing your thinking with us about continuing education -- an issue of such importance that the Commission chose it as one of only three areas in which it is sponsoring study. Upon completion of the project, Spring 1974, we will send you a summary of our findings and recommendations.

Cordially yours,

Betty Stone
Elizabeth W. Stone, Ph.D.
Project Director

Ruth Patrick
Ruth J. Patrick, Ph. D.
Associate Project Director

Barbara Conroy
Barbara Conroy
Research Associate

Enclosures: 1) Mini-charette suggestions 2) Mini-charette report

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MINI-CHARETTE SUGGESTIONS

1. **Have clearly in your own mind the objectives that you hope to achieve by holding a mini-charette.*** These are some of the questions that would seem important, but you may have others:

A. What would constitute a conceptual and practical blueprint for the provision of equal, coordinated opportunities throughout the country for those who wish to continue their lifetime of learning?

- What is needed?
- How should it be done?
- Who should do it?

1. What should the blueprint provide for the individual -- what can he or she get from the system? What personalized criteria need to be met?
2. What should the blueprint provide for specific groups (e.g., librarians, technical information specialists, paraprofessionals, library technicians, clericals, trustees)?

B. Needs change rapidly -- how can the blueprint provide for assessing continuously the needs of practitioners?

C. What are alternative ways that a blueprint might be described that would provide for the following elements?

1. What criteria should be met?
2. What should be the pattern of organization?
3. What should be the pattern of financing?
4. What should be the type of content covered in programming?
5. Who should have the decision-making power of determining content?
6. What should be the pattern of staffing?
7. How can present programs that have proved effective be integrated into nationwide planning and be made more effective?
8. How can effective use be made of instructional technology?
9. Who should develop and maintain standards and criteria for continuing education programs and materials?
10. How will experimentation be carried on with different modes of continuing education? And by whom?
11. How will experimentation be carried on with different methods of continuing education? And by whom?
12. How will long-range planning correlation and coordination necessary to meet the objectives of a comprehensive plan be assured?
13. What should be the plan for organized distribution and dissemination of program elements that are developed?
14. How should support be gained for a nationwide plan by all relevant groups, e.g., employing libraries, professional associations, library schools, universities, individual practitioners?

---

* You may find the enclosed bibliography of selected readings in continuing education useful in preparing yourself and other participants for the mini-charette.

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2. Invite a few people who you know are interested in continuing education -- it is suggested that you invite at least a few from other professions as they will have many ideas to share from their professions that have proved successful. The possibilities are almost limitless. We suggest that you not overlook all levels of library staff, trustees or board members, specialists in education technology, etc. To those outside the profession, reasons for their participation might be pointed out: (1) the effective transfer of information is essential for all of our society and continuing education for librarians and information scientists makes this a possibility; and (2) ideas suggested for library and information science might have direct application to their own profession.

   You may wish to provide the mini-charette participants with a copy of these suggestions in order to acquaint them with the mini-charette format and the topics that will be discussed.

3. On arrival not only the objectives but the atmosphere that should prevail should be made clear. A charette is a process of bringing people together to share thoughts on a particular issue -- with complete freedom to respond at a unique and personal level to the problems at hand. Through a process of sharing and integration the charette should produce new approaches to the solving of problems that,individually, the participants might never have thought of. The charette is seen as a major resource for gaining ideas. No one should feel his ideas are being squashed.

   The atmosphere should be one which encourages the expression of diverse opinions and contributions. Design building is fast-paced, but efficiently handled by the group leader who keeps the group's attention centered on the issues at hand.

4. The expected product is a one or two page report of the chief ideas that came from your charette. These need not be lengthy reports, but should cover the main concepts presented and give an idea of the degree of consensus that the group showed for each of the ideas you report.

MINI-CHARETTE REPORT

(Page 1 of 2)

1. **Charette Leader Name and Position:** ______________________________

   ____

2. **Number Participating** __________

3. **Date Held:** ______________________

4. **Place:** ____

5. **Identification of the positions held by those participating in the charette:**

   ____

   ____

   ____

   ____

   ____

   ____

   ____

   ____

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MINI-CHARETTE REPORT

(Page 2 of 2)

Issue: What would constitute a conceptual and practical blueprint for the provision of equal coordinated opportunities throughout the nation for those who wish to continue their lifetime of learning ?

What is Needed ?	How Should it be Done ?	Who Should do it ?

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Continuing Education for R and D Careers: An Exploratory Study of Employer-Sponsored and Self-Teaching Models of Continuing Education in Large Industrial and Federal Government Owned R & D Laboratories. National Science Foundation, Chicago, 1969. (ED 035 813)

In this comprehensive survey of the objectives and modes of continuing education, technological obsolescence in an individual means a deficiency of knowledge causing him to approach problems with viewpoints, theories, and techniques less effective than others currently used in his field of specialization. One of the chief goals of the Committee was the planning of the academic curricula and structuring the employment situation similar to that of engineers who are trained for a lifetime of continuing study as part of their normal careers. "When this goal is achieved, 'overcoming' obsolescence will give way to 'preventing' obsolescence - - which is in turn synonymous with 'keeping up to date' with new knowledge and maintaining useful skills and knowledge."

All major modes of continuing education are reviewed and their strengths, weaknesses, and most effective use analyzed. In the research relative to the academic institutions and continuing education, one of the most basic changes recommended is to incorporate into the university reward system acknowledgement that continuing education is a respectable and reputable career line for academic faculty. "Academic effort at present is contingent on individual faculty members sacrificing the rewards of the academic system or squeezing continuing education efforts into the myriad of other activities demanded of them. This is one side of the coin. The other is the general down-grading of non-credit activities in the spectrum of university teaching relative to courses in the regular curricula. Yet there is general agreement that continuing education must be non-credit (for the most part) in order to develop formats which are more flexible than university credit courses in meeting individual's needs."

The study concludes that universities and colleges should accept leadership in developing, evaluating, and experimenting with new methods of instruction in order to explore their potential usefulness in the field of continuing education. "Employers must be prepared to engage in continuing education in order to take advantage of appropriate modes of continuing education which are available only or primarily at times other than evenings and weekends....While released time is a matter of employer policy, its relevance to university efforts is that without it universities are effectively stymied in experimenting with varying-size blocks of time....Special emphasis is placed on the need for long-range planning for continuing education in collaborative arrangements. We also recommend...that the search for new and different educational techniques and modes be continued in order to maximize alternatives available."

Other findings of particular interest: 1) There is evidence that continuing education on an if-and-when basis is insufficient to cope with the requirements of an R & D laboratory, and 2) for an individual to be personally motivated toward education or training, he must see the results of the learning as being real and necessary in the performance of his job.

Dryer, Bernard V., ed. "Lifetime Learning for Physicians: Principles, Practices, Proposals," Journal of Medical Education, 37 (June, 1962), 1-134.

This comprehensive "landmark" report emphasized the necessity of cooperative, long-range planning by all concerned professional groups if lifetime professional education is to be achieved within a profession. Through full use of the new technology, it advocated the concept of "universities without walls." The study has three major parts: 1) Principles (based on assumptions); 2) Practices (based on the criteria considered

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necessary for continuing education programs: excellence of content, personal satisfaction, freedom of choice, continuity, accessibility, and convenience); 3) Proposals for action. The necessity of a wide use of multi-media is emphasized throughout as an imperative. Eight health related national professional associations sponsored and joined in developing the study. An 11 page bibliography on continuing education emphasizing a multi-media approach is included.

Hiatt, Peter. "WICHE Continuing Education Program for Library Personnel," *Illinois Libraries*, 55, no. 5 (May, 1973), 332-336.

In a brief overview of the present status of the Western Council on Continuing Education for Library Personnel established under WICHE in 1972, Hiatt makes compelling cases, first, for the need for continuing education for library personnel, and, second, for the special advantages offered by a multi-media consortium in being able to meet these needs effectively with innovative and coordinated programs. Included is a brief treatment of the Council's history and funding.

Houle, Cyril O. "The Comparative Study of Continuing Professional Education." *Convergence*, 3 (no. 4, 1970), 3-12.

Professor Houle of the University of Chicago considers the value of comparative analyses of the professions in the area of continuing education. Points of comparison that he thinks would be worthy of a study include: methods used in professional continuing education; new innovative techniques, instead of reliance on the traditional practices of journal readings, short courses, or conventions; comparison of the patterns of opportunities offered by relevant groups such as universities, industry, government agencies.

He centers particular attention on what he considers the most worrisome group which is common to all professions -- the laggards, whose performance is so poor they are a menace to their clients and a source of embarrassment to their colleagues. What causes each profession to have recruits of this type? Houle suggests that one reason may be that the student is often given a poor model to follow during his formative stage in the profession; later he becomes dissatisfied with the thought of having to engage in either life-long learning and/or research. Motivation toward continuing education he views as a major problem in all the professions.

Institute for Local Self Government. *Continuing Continuing Education for the Public Service: A Design for Action for Education and Training for the Public Service.* Berkeley, Calif.: Institute for Local Self Government, 1971.

This report was prepared to assist the University of California to consider its continuing education role for community development/public administrators.

Chapter Two deals with specific "Continuing Education Needs: The View From the Field." It lists essential conditions for a successful continuing education program for the public service: 1) the continuing education program should begin with what the public servant has already experienced and act as a gate to what he has yet to discover; 2) the program should follow the most successful modern pedagogical models; 3) it should provide state and local government executives with as much insight into organizational and extra-organizational human relationships as possible; "...continuing education should be aimed at achieving the goals of the government executive; to be most effective they should be his goals." The report points out additional guides for continuing

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education programs based on research by Professor Howard McCluskey, School of Education, University of Michigan, concerning the differences between adult learning and childhood learning relative to the time dimension, authority relationships, and reality potentials. As they would equally apply to any library continuing education program, they are quoted:

> The Time Dimension: Few adults have access to the large blocks of time that are available to young people. Instead the adult must look to few and scattered periods such as evenings, weekends, vacation or released time from regular obligations. The adult's use of time is competitive. When engaged in learning, some other activity must give way.
>
> Authority Relationships: The authority of the teacher of the young is established by law and reinforced by many factors. In adult education, the superiority possessed by the teacher is based only on the competence with which he performs his instructional tasks. The fact that both students and teachers are adults has significant implications for the climate of interaction in the learning process. It suggests the desirability of shared responsibility for the success of learning in which the teacher helps the learner to learn and the learner helps the teacher to teach.
>
> Reality Potentials: For the young, schooling is largely preparatory for a world of experience yet to come. For adults, learning arises from and becomes part of the here-and-now world of life itself. There is often a one-to-one relation between the item learned and the presence of that item in daily work experience. In no other area of education is the ratio of input to impact potentially so favorable and impressive.

Chapter Three makes the report's major recommendation -- "A California Staff College for State and Local Government to provide continuing education for the public service, under the sponsorship of the University of California." This proposal is presented in great detail, including curriculum guidelines, major budget features, and physical facilities. In concluding their case for the Staff College the following Harvard comment is cited as pertinent:

> There is surely one lesson at least, that the schools of public administration can learn from the older professional schools in American universities; the better ones have moved steadily away from applied training that is designed to help a man gain admittance to his profession, and towards the new fundamental kinds of education that help him adapt to new developments by continuous self education throughout his career.

Chapter Four gives a comprehensive review of "Technology: The New Resource for Continuing Education."

Chapter Five presents 100 annotated bibliographical references on the role of academic institutions in community development/public administration continuing education. Appendix A presents 31 pages of sample models for continuing education in the public service. Appendix C summarizes an International Seminar on Training of Senior Local Government Officers held in Berlin in March, 1970.

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Shera, Jesse H. "The Self-Destructing Diploma." Ohio Library Association Bulletin, 42 (October, 1972), 4-8.

Citing example of an upsurge of concern and activity in the area of continuing education in librarianship, Shera concludes that "good as these activities have been, and many have been conspicuously successful, they suffer from lack of coordination and a unified formalized structure that would establish them as an important part of the practicing librarian's professional life."

Ten conditions are identified in which library continuing education has flourished: 1) in periods of crisis, change, and professional stress; 2) in formats which emphasize interdisciplinary approaches by those outside of librarianship -- "the degree of 'outside' participation offered"; 3) in patterns which are cumulative, "each building upon and being more advanced than that which precedes it"; 4) in programming that demands more than passive listening -- "ideally exercises, reports, even tests or examinations, should be required to give the participants a goal toward which to work and a sense of accomplishment when the program is ended"; 5) in allocation of time for participants to talk informally with staff and other program participants; 6) in cooperative planning and implementation involving the libraries, the library schools, the state library and the state library association ("with the state library in the strongest position to assume leadership"); 7) in application of the system concept; 8) in demanding sacrifices on the part of all involved -- participants and the employing library; 9) in providing adequate financing; and, 10) finally, in recognizing that continuing education is an integrated whole, not a cluster of sporadic and isolated instances -- "the state library, the state library association, and the libraries of the state must stop playing around the edges of the problem."

Stone, Elizabeth W. "Continuing Education for Librarianship: Ideas for Action." American Libraries, 1 (June, 1970), 543-553.

The article demonstrates, based on responses to a questionnaire, the need for cooperative efforts of seven relevant groups in providing favorable conditions for the professional growth of librarians. Continuing education is a nationwide problem for which a cooperative nationwide plan based on the best thinking and planning of all relevant groups within the library profession is needed. Until recently continuing education has been essentially a periphery activity in librarianship; this article emphasizes that the continuing education of librarians is one of the most important problems facing library education today.

Immediate actions recommended include the following:

> 1) The formation of an administrative partnership of all concerned groups who, using multidisciplinary knowledge and skills, would provide continuity of policy, planning, coordination, implementation, and administration for a nationwide continuing education program; 2) a thorough reexamination of what constitutes a truly effective program of continuing education; and 3) the use of system design techniques in planning and implementing opportunities which would make use of the new and imaginative tools now available through modern technology to reinforce the learning process.

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Stone, Elizabeth W., ed. "Personnel Development and Continuing Education in Libraries," Library Trends, 20 (July, 1971), 1-183.

The editor of the issue also authored the introduction in which it is explained that the whole issue of Library Trends addresses itself to the following dilemma: "How can we optimally integrate the technical and human resources that we manage toward achieving the library's service mission and, at the same time, manage working arrangements and role relationships so that people's needs for self-worth, growth, and development are significantly met in our libraries?"

The point of view throughout the issue is that courses, orientation programs, institutes, workshops, do not constitute the total means of staff development and continuing education. This is reflected in the table of contents which has articles by leading librarians on personnel planning, employee motivation, participative management, personnel evaluation, the training subsystem, social interaction, skills, continuing education to meet the personalized criteria of libraries, programs for continuing library education, national planning for continuing library education. The Staff Development Committee of the Personnel Section of the Library Administration Division of the American Library Association, which was responsible for the planning and implementation of such an issue, prepared two additional chapters for the issue, one on a model for continuing education and personnel development in libraries, and the other, guidelines to the development of human resources in libraries. This is the first issue of Library Trends to be devoted exclusively to staff development and continuing education.

Sullivan, Peggy, ed. "Staff Development: A Continuing Theme With Variations," School Media Quarterly, 1 (Spring, 1973), 179-200.

This issue of the School Media Quarterly features an editorial and four articles relating to the importance of school media personnel being involved in continuing education activities. All edited by Sullivan, the four articles which make up the series are "Beyond the Formalities," by Patrick R. Penland, p. 182-190; "The First Step of the MILE," by Elinor Gay Metcalf, p. 191-193; "The Short-Term Institute: A Vehicle for Continuing Education," by Jane A. Hannigan, p. 193-197; and "Teachers Need Choices, Too," by Anna M. Beachner, p. 197-200.

Zachert, Martha Jane K. "Continuing Education for Librarians: The Role of the Learner." In: Goehring, Eleanor E., ed., University of Tennessee Library Lectures Numbers Twenty-two, Twenty-three, and Twenty-four. Knoxville, Tennessee: The University of Tennessee, 1972.

After citing some significant, but fragmented, examples of continuing education librarianship, the paper concentrates on recent research which indicates the ways in which adults learn. The author maintains this has great relevance for planners, administrators, and teachers concerned with the development of continuing education programs. The most "pregnant generalization from adult learning research is that adults learn differently from children; the inescapable conclusion is that education for adults must be planned and implemented differently from education for children. Acceptance of this generalization augurs for change." In fact, the author believes that "the ultimate success or failure of the efforts for continuing education may well rest not on how perceptively the planners and the teachers understand the great perplexing problems of librarianship, but on their perception of how adults learn."

Dr. Zachert develops the profile and the role of an adult learner. From this she draws implications for the type of learning situation and the type of teaching that should prevail in library continuing education efforts. Important factors include: *problem-centered small group situations*, which take into account the physical comforts of the participants and consideration for their social as well as their expressed learning needs; enough flexibility to provide for using alternative routes of reaching announced objectives (including alternatives suggested by members of the group itself). The teacher should be adept in communication rather than an authority figure; should be an expert in group process; and should allow learners to assume "full responsibility for their own participation and their own contributions to group objectives, while he concentrates on facilitating interaction that will be satisfying to the members of the group."

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APPENDIX B

QUESTIONNAIRE SURVEY--

TABLES AND ANALYSIS OF DATA

APPENDIX B

QUESTIONNAIRE AND SURVEY -- TABLES AND ANALYSIS OF DATA

INTRODUCTION

The data collected through the questionnaire survey is presented in the following Tables. Each Table is accompanied by a brief analysis of the data in the Table.

As explained under "Research Methodology" in Chapter 1, of the eleven groups surveyed, the complete universe of six groups was used (labelled "complete sample") and of the remaining five groups (labelled "partial sample") only a judgemental sample was used.

In each Table, "N" represents the total number of respondents that replied to the particular questionnaire item presented in the Table; "n" represents the number of respondents in each group -- national libraries, state library associations, etc., -- that replied to the questionnaire item.

In Tables in which the data reflect aspects of the various organizations, no overall total is given. In Tables which reflect the opinions of the individuals filling out the questionnaire, in most cases an overall total was presented -- that is, pooling all the respondents together -- which could be regarded as a representative opinion of the population of librarians, bearing in mind, of course, the sampling plan used -- especially the judgmental sample labelled "partial sample" in the Tables. This aspect must also be remembered whenever any comparison is made between groups labelled "complete sample" and groups labelled "partial sample."

TABLE 1

Table 1 lists the groups participating in the questionnaire survey and their response rate. The actual response rate was 74 percent, but four percent of the questionnaires arrived after the cut-off date and were too late to be included in the analysis. Hence, the data included in the Tables was derived from the response of the first 70 percent that responded to the questionnaire.

This response rate is very high, especially considering the length of the questionnaire, and clearly indicates the importance respondents place upon continuing education for library and information science personnel.

TABLE 1

GROUPS PARTICIPATING IN QUESTIONNAIRE SURVEY AND THEIR RESPONSE RATE, 1973

GROUP NAME	NUMBER IN UNIVERSE	NUMBER IN SAMPLE	NUMBER OF RESPONDENTS	PERCENTAGE OF RESPONSE
Complete Sample				
Libraries--national	3	3	3	100
Library associations--national	38	38	24	63
Library associations--regional	7	7	4	57
Library associations--state	51 *	51	29	57
Library schools--accredited	51	51	40	78
State library agencies	51 *	51	39	76
Subtotal	201	201	139	69
Partial Sample				
Libraries--academic	... **	12	9	75
Libraries--public	... **	13	9	69
Libraries--school	... **	13	8	62
Libraries--special	... **	12	8	67
Subtotal	...	50	34	68
Library schools--unaccredited	250 ***	20	16	80
Total	...	271	189	70 ****

* Includes the District of Columbia

** The exact number of libraries in these four categories is not known but is estimated to be approximately twenty-four thousand.

*** Estimate, as exact number is not known.

**** There was a 74 percent total response rate, but four percent of these responses were received too late to be included in the tabulations, however, the answers to open end questions were used.

TABLE 2

Table 2 shows that 55 percent of the complete sample respondent organizations have assigned one specific person or persons the responsibility for continuing education. These persons offer the possibility of being a rich resource to promote and provide continuing education opportunities and to provide the basis for a communication network to distribute continuing education information and programs. These persons could be asked to play a leading role in providing data and ideas for CLENE.

Considering that the assignment of a specific person or persons with responsibility for continuing education might be an indication of concern for continuing education, a closer look at the complete sample gives some indication of which groups of respondent organizations maintain a greater concern for continuing education. The regional library associations rank first, followed by the accredited library schools and then the national libraries. However, to implement the idea of CLENE, those organizations that do not now have someone designated with responsibility for continuing education would designate a person to be responsible for continuing education.

The criterion for the selection of the partial sample was that the organizations be concerned with continuing education. Sixty-seven percent of the responding libraries and 53 percent of the responding unaccredited library schools had one specific person or persons with special responsibility in the area of continuing education, thus, in part validating the selection of the partial sample.

TABLE 2

NUMBER OF ORGANIZATIONS WITH ONE SPECIFIC PERSON OR PERSONS HAVING SPECIAL RESPONSIBILITY IN THE AREA OF CONTINUING EDUCATION, 1973

(Questionnaire item number 5.) N=184

GROUP NAME	n	NUMBER	PERCENTAGE	RANK (of percentage)
Complete Sample				
Libraries--national	3	2	67	3
Library associations--national	24	15	62	4
Library associations--regional	4	3	75	1
Library associations--state	29	13	45	5
Library schools--accredited	39	25	68	2
State library agencies	37	17	46	6
Total	136	75	55	
Partial Sample				
Libraries--academic	9	6	67	3
Libraries--public	8	4	50	4
Libraries--school	8	6	75	1/2
Libraries--special	8	6	75	1/2
Total	33	22	67	
Library schools--unaccredited	15	8	53	

TABLE 3

Questionnaire respondents were asked to describe, first, by geographic level (Table 3) and second, by type of library personnel (Table 4) the groups toward which the continuing education programs of their organizations are currently directed.

In Table 3, the total percentage of 70, computed for the complete sample, indicates that the major effort is concentrated at the state level. The three groups which direct the greatest attention to the state level are state library agencies (97 percent), state library associations (93 percent), and accredited library schools (58 percent). Since there appears to be extensive activity directed on a statewide basis, it would seem especially important that these three most active groups coordinate their efforts to avoid duplication and to fill any gaps in current continuing education efforts that this pooling of information would reveal.

Many of the responses to this questionnaire item were as might have been expected. National organizations have a national orientation, regional ones have a regional orientation, and state ones have a state orientation. One exception is the national libraries. Only one national library directs its continuing education programs toward a national level, whereas the other two national libraries direct their continuing education programs toward a local level.

The responses of the accredited library schools indicate a wide range of geographic levels. The major thrust is toward the state level (58 percent); however, the respondent accredited library schools also direct continuing education programs toward the national (37 percent), regional-interstate (51 percent), regional-intrastate (38 percent), and local (41 percent) levels.

Since the purpose of this Project is to recommend a way of providing continuing education on a nationwide scale, it is interesting to note the present state of national efforts. The national library associations (90 percent of the responding national library associations) are directing their programs at a national level. Although we do not know how extensive or effective these efforts are, at least they present a beginning for nationwide efforts. Thirty-seven percent of the responding accredited library schools direct continuing education programs toward the national level. Here, too, lies a potential resource for nationwide efforts.

The major efforts of the responding libraries are directed at the local level, as might be expected.

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TABLE 3

GEOGRAPHIC LEVELS TOWARD WHICH PRESENT CONTINUING EDUCATION PROGRAMS ARE DIRECTED, AS INDICATED BY NUMBER AND PERCENTAGE OF RESPONDENT ORGANIZATIONS, 1973

(Questionnaire item number 6a) N=177

GROUP NAME	n	GEOGRAPHIC LEVELS National		Regional (Interstate)		State		Regional (Intrastate)		Local		Other	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Complete Sample													
Libraries--national	3	1	33	1	33	1	33	0	0	2	67	0	0
Library associations--national	21	19	90	6	29	3	14	3	14	6	29	2	10
Library associations—regional	4	0	0	4	100	1	25	1	25	0	0	0	0
Library associations--state	29	0	0	0	0	27	93	6	21	7	24	1	3
Library schools--accredited	38	14	37	20	51	23	58	15	38	16	41	0	0
State library agencies	39	0	0	0	0	38	97	12	31	10	26	0	0
Total number	134	34		31		93		37		41		3	
Total percentage			25		23		70		28		31		2
Partial Sample													
Libraries--academic	8	0	0	0	0	0	0	0	0	4	50	4	50
Libraries--public	8	1	12	0	0	1	12	2	25	7	88	0	0
Libraries--school	5	0	0	0	0	2	40	1	20	4	80	0	0
Libraries--special	7	4	57	1	14	1	14	1	14	4	57	1	14
Total number	28	5		1		4		4		19		5	
Total percentage			18		4		14		14		68		18
Library schools--unaccredited	15	2	13	5	33	7	47	5	33	8	53	0	0

TABLE 4

Table 4 indicates that major effort of the complete sample respondent groups (85 percent) is directed toward public library personnel. The other four types of library personnel -- academic, school, special, and information center -- receive 65 percent, 62 percent, 54 percent and 26 percent, respectively, of the complete sample effort.

These findings would seem to indicate that planners of continuing education should determine if needs of all types of librarians and information scientists are being met adequately and also if there is a large amount of duplication of effort.

An examination of the data from the point of specific organizations reveals that the regional library associations and the library schools generally direct their programs toward a wider range of library personnel that the other groups ; however, information center personnel is low for the library schools -- accredited and unaccredited (39 percent and 0 percent, respectively). The state library associations parallel the accredited library schools. Their programs are directed toward all types of library personnel, but to a lesser extent, and this is especially so for information center personnel (10 percent). The national library associations follow the above pattern. Their programs are directed toward all types of library personnel, but their major emphasis is on academic library personnel (65 percent).

The state library agencies focus primarily on public library personnel (97 percent). There is a large step to the next group they serve -- school library personnel (36 percent). These figures seem to indicate that currently the majority of agencies are not uniformly directing their programs toward all types of library personnel.

One hundred percent of three of the respondent groups in the partial sample -- academic, public, and school libraries -- direct their programs toward the type of personnel particular to their own type of library. The responses of the special libraries reflects a wider range of library personnel: special, information center, and academic personnel receive 71 percent, 14 percent, and 14 percent, respectively, of the special libraries' continuing education efforts. The unaccredited library schools ' major emphasis appears to be directed toward school library personnel.

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TABLE 4

TYPE OF LIBRARY PERSONNEL TOWARD WHICH PRESENT CONTINUING EDUCATION PROGRAMS ARE DIRECTED AS INDICATED BY NUMBER AND PERCENTAGE OF RESPONDENT ORGANIZATIONS, 1973

(Questionnaire item number 6.b.) N=180

GROUP NAME	n	TYPE OF LIBRARY PERSONNEL Academic		Public		School		Special		Information Center		Other	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Complete Sample													
Libraries--national	3	1	33	0	0	0	0	0	0	0	0	2	67
Library associations—national	20	13	65	9	45	7	35	10	50	6	30	7	30
Library associations--regional	4	4	100	4	100	4	100	4	100	3	75	3	75
Library associations--state	31	26	84	28	90	23	74	18	58	3	10	4	13
Library schools--accredited	36	34	94	34	94	35	97	29	81	14	39	8	22
State library agencies	39	9	23	38	97	14	36	11	28	8	21	10	26
Total number	133	87		113		83		72		34		34	
Total percentage			65		85		62		54		26		26
Partial Sample													
Libraries--academic	9	9	100	0	0	0	0	0	0	0	0	0	0
Libraries--public	9	0	0	9	100	1	11	0	0	0	0	0	0
Libraries--school	7	0	0	0	0	7	100	0	0	0	0	0	0
Libraries--special	7	1	14	0	0	0	0	5	71	1	14	2	29
Total number	32	10		9		8		5		1		2	
Total percentage			31		28		25		16		3		6
Library schools—unaccredited	15	8	53	6	40	13	87	5	33	0	0	3	20

TABLE 5

The respondents were asked to check the phrases they thought should or should not be incorporated into an operational definition for continuing education and in addition to rank the priority of the top five phrases they thought should be included in the definition.

The top seven phrases in order of priority are that continuing education:

1. Implies a nation of lifelong learning as a means of keeping an individual up-to-date with new knowledge ; it prevents obsolescence

2. Includes updating a person's education (e.g., makes an individual's education comparable to that of a person receiving a like degree at the present time)

3. Allows for diversification to a new area within a field (e.g., supervisory and management training)

4. Assumes that the individual carries the basic responsibility for his own development

5. Involves educational activities which are beyond those normally considered necessary for entrance into the field

6. Is provided for all personnel, professional and supportive

7. Includes the "refresher" objective (e.g., the review of once familiar material to sharpen up the skills and knowledge once had)

The phrase, "continuing education is provided for all personnel, professional and supportive," is of special interest, because the literature indicates that generally continuing education efforts in other disciplines are directed toward professionals only. Although this phrase ranked sixth, 88 percent of the questionnaire respondents thought it should be included in the definition (it also reflects the thinking of a majority of the interviewees).

A phrase that warrants discussion is, "continuing education applies only to education which will enhance the individual's competence for the job now held or aspired to in the near future." Its exclusion is notable because it is a phrase generally accepted by other professions. One probable explanation, as pointed out by the Advisory Board members of this Project, may be that the respondents disagree with the exclusive nature of the word "only" and feel that the definition of continuing education should be interpreted in a larger sense than this phrase would allow.

TABLE 5

RANKED ORDER OF COMPONENTS OF AN OPERATIONAL DEFINITION OF CONTINUING EDUCATION, 1973

(Questionnaire item number I. A.) N=189

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DEFINITION COMPONENTS	COMPONENT SHOULD APPLY				RANKED ORDER	
	YES		NO		WEIGHT	RANK
	No.	%	No.	%		
Generally Accepted in Other Professions:						
Continuing Education (CE) involves educational activities which are beyond those normally considered necessary for entrance into the field.	150	80	28	15	247	5
CE applies only to education which will enhance the individual's competence for the job now held or aspired to in the near future.	58	31	121	64	115	10
CE implies a notion of lifelong learning as a means of keeping an individual up-to-date with new knowledge. It prevents obsolescence.	185	98	4	2	729	1
CE assumes that the individual carries the basic responsibility for his own development.	149	79	25	13	265	4
CE includes updating a person's education (e.g. makes an individual's education comparable to that of a person receiving a like degree at the present time).	173	92	10	5	345	2
CE includes the "refresher" objective (e.g., the review of once familiar material to sharpen up the skills and knowledge once had).	162	86	23	12	188	7
CE allows for diversification to a new area within a field (e.g., supervisory and management training).	178	95	8	4	287	3
Excluded by Some Professions:						
CE includes upgrading a person's education (e.g., a person may work toward a higher degree which raises the level of his formal capabilities).	131	69	50	26	69	11
CE allows for diversification to a new field (e.g., a person educated in one field may seek to obtain some formal education in another field.	124	66	54	29	31	12
CE allows for broadening a person's education (e.g., a person educated in one field may add a new perspective in his field such as the study of political science or sociology as it is related to his own field).	164	87	18	10	146	8
CE should include training which is planned and provided by the employing organization to further the organization's goals.	150	71	27	14	127	9
CE is provided for all personnel, professional and supportive.	167	88	18	10	191	6

---

* The weight for each rank is the sum of the initial weighted ranks where Rank 1 had a weight of 5, 2 a weight of 4, 3 a weight of 3, 4 a weight of 2, and 5 a weight of 1. Respondents were asked to rank the top 5 components they thought should be included in the definition.

TABLE 6

Table 6 indicates the extent to which continuing education is considered a priority item by the respondent organizations.

The results of the complete sample indicate that a discrepancy exists between the priority rank of "now" and of "should be." Seventeen percent of the complete sample presently give continuing education a "high" priority while 57 percent feel it should have a "high" priority. Thirty-four percent said continuing education currently has a low priority, but only one percent felt that continuing education should have a low priority. One percent did not know how much priority continuing education should have.

In both the complete and partial sample everyone agreed that continuing education should have some kind of priority (except the one percent that did not know how much priority continuing education should have). That is to say, no one said that continuing education should have no priority at all.

The regional library associations (4) unanimously agreed that continuing education should have a high priority. Additionally, 88 percent of the responding school libraries felt that continuing education should have a high priority.

The trend within most groups was that most organizations favored giving continuing education a "high" priority (8 out of 11 groups sampled favored a high priority.) The three groups indicating "medium priority" were national libraries, accredited library schools, and academic libraries.

This data seems to indicate that the respondents, in general, think that a much higher priority should be given to continuing education than is given now.

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TABLE 6

THE PRIORITY OF CONTINUING EDUCATION IN ORGANIZATIONS: WHAT IT IS NOW AND WHAT IT SHOULD BE, AS INDICATED BY NUMBER AND PERCENTAGE OF RESPONDENT ORGANIZATIONS, 1973

(Questionnaire item number I.B.1.) N=187

GROUP NAME	Item	n	PRIORITY High		Medium		Low		None		Don't Know	
			No.	%	No.	%	No.	%	No.	%	No.	%
Complete Sample												
Libraries--national	Is now	3	0	0	2	66	1	33	0	0	0	0
	Should be	3	1	33	2	66	0	0	0	0	0	0
Library associations--national	Is now	23	9	39	8	35	2	9	3	13	1	4
	Should be	22	18	81	4	18	0	0	0	0	0	0
Library associations--regional	Is now	4	1	25	3	75	0	0	0	0	0	0
	Should be	4	4	100	0	0	0	0	0	0	0	0
Library associations--state	Is now	30	2	7	13	43	15	50	0	0	0	0
	Should be	30	15	50	14	47	0	0	0	0	1	3
Library schools--accredited	Is now	39	3	8	21	54	15	38	0	0	2	0
	Should be	39	17	44	21	54	1	3	0	0	0	0
State library agencies	Is now	39	8	21	17	44	14	36	0	0	0	0
	Should be	38	23	60	15	39	0	0	0	0	0	0
Total number	Is now	138	23		64		47		3		3	2
	Should be	136	78		56		1		0		1	
Total percentage	Is now			17		46		34		2		2
	Should be			57		41		1		0		1
Partial Sample												
Libraries--academic	Is now	9	1	11	4	44	4	44	0	0	0	0
	Should be	9	3	33	6	66	0	0	0	0	0	0
Libraries--public	Is now	9	4	44	3	33	2	22	0	0	0	0
	Should be	9	7	78	2	22	0	0	0	0	0	0
Libraries--school	Is now	8	2	25	4	38	2	25	0	0	0	0
	Should be	8	7	88	1	12	0	0	0	0	0	0
Libraries--special	Is now	8	2	25	6	75	0	0	0	0	0	0
	Should be	8	5	62	3	38	0	0	0	0	0	0
Total number	Is now	34	9		17		8		0		0	
	Should be	34	22		12		0		0		0	
Total percentage	Is now			26		50		24		0		0
	Should be			65		35		0		0		0
Library schools--unaccredited	Is now	15	3	20	7	47	4	27	1	7	0	0
	Should be	13	9	69	4	31	0	0	0	0	0	0

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TABLE 7

Table 7 indicates the perceived influence of various forces working against continuing education. The questionnaire item itself (I. B. 2.) presupposed that everyone answering the question felt that continuing education should have a higher priority than it currently holds. The question read: "If you think continuing education should have a higher priority in your organization than it does now, what are the forces against its having a higher priority?" The response rate for this question, therefore, assumes importance in light of the manner in which the question was framed. The response rate for this question was only nine percent (of the total response rate) lower than the average response rate for all of the other questions in this survey instrument.

Budget constraints were perceived as the single most influential force working against continuing education progress (82 percent of the complete sample answering this question). This is also apparent in the partial sample, where, for example, 100 percent of the responding school libraries checked "budget" as a constraint.

Another serious force against continuing education, as perceived by the majority of respondent organizations, was "organizational structure." Sixty percent of the responding national library associations indicated this as a barrier and 29 percent of the responding complete sample perceived it as a constraint. This suggests the importance of organizational structure for the effective operation of a national plan.

In responding to the "Other (Please specify)" for this questionnaire item, respondents expressed a great diversity of opinion as to the forces against continuing education's having a higher priority. The "other" force indicated the most frequently concerns the lack of positive attitude on the part of potential students, personnel, and funding organizations. Other forces against continuing education having a higher priority were personnel constraints, time constraints, difficulty in identifying a potential audience, insufficient coordination with association and agency efforts, lack of convenient educational opportunities, lack of leadership willing and able to devote efforts to continuing education programs, and the lack of individual initiative.

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TABLE 7

FORCES AGAINST CONTINUING EDUCATION HAVING A HIGHER PRIORITY THAN IT DOES NOW, AS INDICATED BY NUMBER AND PERCENTAGE OF RESPONDENT ORGANIZATIONS, 1973

(Questionnaire item number I. B. 2.) N=149

GROUP NAME	n	FORCES																	
												Lack of Positive Attitude of:							
		Budget constraints		Other matters seem more pressing		Other		Organizational structure		Present accreditation standards for library schools do not encourage continuing education		Library directors		Management		Supervisors		Tenure	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Complete Sample																			
Libraries--national	3	2	67	1	33	0	0	0	0	0	0	0	0	1	33	1	33	0	0
Library associations--national	15	12	80	1	7	4	27	9	60	0	0	1	7	1	7	1	7	0	0
Library associations--regional	4	2	50	2	50	2	50	2	50	3	75	2	50	0	0	0	0	0	0
Library associations--state	26	17	65	12	46	6	23	8	31	4	15	1	4	0	0	0	0	0	0
Library schools--accredited	29	27	93	12	41	12	41	8	28	4	14	7	24	4	14	4	14	1	3
State library agencies	29	27	93	9	31	8	28	4	14	4	14	1	3	0	0	0	0	1	3
Total number	106	87		37		32		31		15		12		6		6		2	
Total percentage			82		35		30		29		14		11		6		6		2
Partial Sample																			
Libraries--academic	8	7	88	7	88	1	12	1	12	0	0	1	12	1	12	0	0	0	0
Libraries--public	9	9	100	6	67	0	0	0	0	1	11	0	0	0	0	1	11	0	0
Libraries--school	5	5	100	4	80	1	20	1	20	3	60	0	0	2	40	0	0	0	0
Libraries--special	7	5	71	3	43	0	14	1	14	0	0	0	0	0	0	0	0	0	0
Total number	29	26		20		2		3		4		1		3		1		0	
Total percentage			90		69		7		10		14		3		3		3		0
Library schools--unaccredited	14	10	71	5	36	2	14	5	36	4	28	3	21	3	21	1	7	0	0

TABLE 8

Table 8 displays the respondent organizations' expenditures on continuing education programs.

Although the overall response to this questionnaire item was high (94 percent of the 189 persons who completed the questionnaire), the number of persons in the complete sample who did not know the expenditures of their organizations on continuing education programs was also high (50 percent). Thus, in calculating the amount spent on continuing education by the six groups of the complete sample, we find that over their past fiscal year, $798,588 was spent by 50 percent of the organizations in the complete sample.

The figures presented in Table 8 cannot be subjected to further analysis and interpretation without prior consideration of a number of important factors.

Because of the various systems of budgeting used by the respondent organizations, the amounts for continuing education specified by the respondents cannot be compared. For instance, some organizations specified that no funds came from the organization budget -- that all programs were self-supporting. Other organizations, however, might have included the tuition from self-supporting programs when making the computations for this questionnaire item. More deviations can be found in the fact that some of those figures reported excluded or included planning time, per diem, grants from foundations, programs incorporated into other line items, approximations (versus exact amounts), publishing costs, and decentralized funds (i.e. funds for extension courses, night courses, courses provided mainly for MLS students but attended by operating librarians).

A closer look at the individual groups of the complete sample reveals that the regional associations have the highest median expenditure ($49,000), followed by the state library agencies ($10,000), and then the accredited library schools ($3,500). One accredited library school reported a figure of $100,000. An explanation for this seemingly high figure is that this particular school included the expenditures for publications in arriving at this figure.

Using the membership figures quoted in the Bowker Annual (Bowker, 1973), and the expenditures reported in Table 8, the per capita amount of money spent was calculated for the nine respondent national associations. The median was $0.23; the highest $7.10; and the lowest $0.11.

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TABLE 8

EXPENDITURES OF ORGANIZATIONS ON CONTINUING EDUCATION PROGRAMS FOR THEIR LAST FISCAL YEAR, 1973

(Questionnaire item number I. B. 3.) N=177

GROUP NAME	n	RESPONDENTS WHO INDICATED AMOUNT OF EXPENDITURES		EXPENDITURES					RESPONDENTS WHO DID NOT KNOW	
		No.	%	Total	Mean	Median	Highest	Lowest	No.	%
Complete Sample										
Libraries--national	2	1	50	2,000	2,000	2,000	2,000	2,000	1	50
Library associations--national	20	9	45	85,698	9,522	2,000	36,698	150	11	55
Library associations--regional	4	2	50	98,000	49,000	49,000	86,000	12,000	2	50
Library associations--state	29	16	55	23,983	1,499	500	10,000	0	13	45
Library schools--accredited	38	12	32	154,000	12,833	3,500	100,000	0	26	68
State library agencies	38	26	68	434,907	16,727	10,000	74,570	0	12	32
Total	131	66	50	798,588	12,100	3,750	100,000	0	65	50
Partial Sample										
Libraries--academic	7	3	43	25,638	8,546	7,000	18,363	275	4	57
Libraries--public	9	7	78	137,978	19,711	6,500	9,700	2,000	2	22
Libraries--school	8	1	12	3,272	3,272	3,272	3,272	3,272	7	75
Libraries--special	8	4	50	10,000	2,500	2,250	5,000	500	4	50
Total	32	15	47	176,888	11,793	5,000	18,363	3,272	17	50
Library schools--unaccredited	14	5	36	4,400	880	400	3,000	0	9	57

TABLE 9

Table 9 presents the percentage of organizations' budgets allocated to continuing education programs. The median percentage for the organizations in the complete sample is 2 percent; for the libraries of the partial sample it is 0.6 percent, and for the unaccredited library schools it is 10 percent.

In the complete sample the three groups who allocate the largest percentage of their budget to continuing education programs (as evidenced from the median) are regional library associations (16 percent), state library associations (6 percent), and national library associations (4 percent).

As stated in the analysis for Table 8, in any analysis of this table prior consideration should be given to a number of important factors, for example, that percentages of budgets were computed in a variety of ways because of the different systems of budgeting among the respondent organizations.

TABLE 9

PERCENTAGE OF ORGANIZATIONS' BUDGET ALLOCATED TO CONTINUING EDUCATION PROGRAMS DURING THEIR LAST FISCAL YEAR, 1973

(Questionnaire item number I. B. 4.) N=152

	n	RESPONDENTS WHO INDICATED PERCENTAGE OF BUDGET		PERCENTAGE OF BUDGET			RESPONDENTS WHO DID NOT KNOW	
		No.	%	Median	Highest	Lowest	No.	%
Complete Sample								
Libraries--national	2	1	50	0.005	0.005	0.005	1	50
Library associations--national	21	7	35	4	62	1	14	70
Library associations--regional	3	2	67	16	100	0	1	33
Library associations--state	23	13	57	6.	30	0	10	33
Library schools--accredited	31	8	26	1.	12	0	23	74
State library agencies	31	20	65	1	25	0	11	60
Total	111	51	46	2	100	0	60	54
Partial Sample								
Libraries--academic	7	1	14	0.37	0.37	0.37	6	86
Libraries--public	9	6	67	0.55	2.4	0.0025	3	33
Libraries--school	7	1	14	0	0	0	6	0
Libraries--special	7	2	29	1	2	0.0025	5	71
Total	30	10	33	0.6	2.4	0.0025	20	67
Library schools--accredited	11	3	27	10	50	0	8	72

TABLE 10

Table 10 indicates the sources from which continuing education programs are currently being funded. The sources are presented in the Table in order of importance for the complete sample.

The figures in this table represent only the frequency of funding, and do not represent the extent of the funding. The source entitled "Organization Budget" on the table may conceivably include other sources, namely, registration fees, tuition, contributions, etc.

Sources of funds reported by the respondents, other than those listed in questionnaire item number I. B. 5, included: sale of materials, sale of continuing education packages, exhibition fees from annual conferences (as mentioned by some of the national, regional, and state library associations); subscriptions, contracts with library systems and school districts, participants in traveling institutes, and institutes and conferences (as indicated by some of the library schools, both accredited and unaccredited).

TABLE 10

SOURCES FROM WHICH CONTINUING EDUCATION PROGRAMS AND ACTIVITIES ARE PRESENTLY FUNDED IN ORGANIZATIONS AS INDICATED BY NUMBER AND PERCENTAGE OF RESPONDENT ORGANIZATIONS, 1973

(Questionnaire item number I. B. 5.) N=180

GROUP NAME	n	SOURCES																			
		Organization budget		Registration fees		Grants--federal government		Tuition		Membership dues		Grants--state government		Other		Grants--foundations		Contributions		Grants--local government	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Complete Sample																					
Libraries--national	2	2	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Library associations--national	20	13	65	16	80	1	5	0	0	13	65	0	0	3	15	2	10	1	5	0	0
Library associations--regional	4	2	67	3	100	1	33	1	33	1	33	3	100	3	100	3	100	1	33	0	0
Library associations--state	27	14	52	19	70	3	11	0	0	20	74	5	19	3	11	4	15	2	7	0	0
Library schools--accredited	40	21	52	31	78	12	30	30	75	1	2	8	20	6	15	2	5	2	5	1	2
State library agencies	38	26	68	11	29	23	61	1	3	2	5	8	21	2	5	1	3	1	3	1	3
Total number	131	78		80		40		32		37		24		17		12		7		2	
Total percentage			60		61		31		24		28		18		13		9		5		2
Partial Sample																					
Libraries--academic	9	9	100	2	22	0	0	1	11	0	0	0	0	2	22	0	0	0	0	0	0
Libraries--public	9	9	100	3	33	5	56	0	0	0	0	4	44	0	0	3	33	0	0	1	11
Libraries--school	8	6	75	1	12	6	75	1	12	1	12	3	38	0	0	1	38	0	0	0	0
Libraries--special	8	8	100	3	38	1	12	2	25	1	12	1	12	1	12	1	12	1	12	0	0
Total number	34	32		9		12		4		2		7		3		5		1		1	
Total percentage			94		26		35		12		6		21		9		15		3		3
Library schools--unaccredited	15	9	60	8	53	5	33	5	33	2	13	4	27	4	27	4	27	0	0	2	13

TABLE 11

Table 11 displays in rank order the areas in which organizations expressed a need for assistance in providing continuing education.

Six of the 11 areas listed in the questionnaire were checked as "need of assistance" by over 50 percent of those surveyed in the complete sample. These are, in rank order: (1) development of continuing education programs; (2) design of continuing education programs; (3) evaluation of effectiveness of continuing education programs; (4) determination of needs of target groups; (5) clearinghouse of information on available continuing education opportunities; (6) consultation with knowledgeable persons in the field. Only two specific areas were listed by less than 30 percent of the complete sample. Thus, it appears that most respondent organizations feel they need assistance in most areas specified.

Of the respondent organizations surveyed in the partial sample, the findings are somewhat different. No single area was considered a need by half or more than half of the respondents.

Forty-one percent of the respondents from among academic libraries, public libraries, school libraries and special libraries collectively expressed a felt need for evaluative assistance.

In the space provided for "Other (Please specify)," responses ranged from "All of the above areas would be helpful" to "You should give us the option to say 'no.' We think we can do most if not all of these things ourselves." However, falling between these two extreme responses, desire for assistance in the following areas was expressed: financial assistance; clearinghouse model for local adaptation; a calendar of continuing education programs in the United States and Canada; skilled and competent coordinator; a cooperative program academically based, throughout the state, that can bring education to the individual.

TABLE 11

AREAS IN WHICH ORGANIZATIONS NEED ASSISTANCE IN PROVIDING CONTINUING EDUCATION, 1973 (Sheet 1 of 2)

(Questionnaire item number I. B. 6.) N=177

GROUP NAME -- COMPLETE SAMPLE

AREAS	Libraries—national		Library associations—national		Library associations—regional		Library associations—state		Library schools—accredited		State library agencies		Total number	Total percentage
n=	3		19		4		30		34		38		128	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Development of continuing education programs	0	0	16	84	4	100	20	67	19	56	19	50	78	61
Design of continuing education programs	0	0	15	79	4	100	17	57	22	65	20	53	78	61
Evaluation of effectiveness of continuing education programs	0	0	12	63	4	100	16	53	17	50	25	66	74	58
Determination of needs of target groups	0	0	17	89	3	75	14	47	19	56	18	47	71	55
Clearinghouse of information on available continuing education opportunities	0	0	10	53	3	75	21	70	17	50	19	50	70	55
Consultation with knowledgeable persons in the field	1	33	10	53	4	100	14	47	14	41	22	58	65	51
A directory of continuing education opportunities	1	33	10	53	3	75	9	30	13	38	21	52	57	45
Packaged continuing education programs (developed by someone else)	0	0	8	42	3	75	9	30	12	35	16	42	48	38
Publicity	1	33	9	47	2	50	9	30	11	32	9	24	41	32
A quality journal on continuing library and information science education	0	0	8	42	2	50	8	27	9	26	10	26	37	29
Distribution of programs or packages produced	0	0	10	53	2	50	5	17	8	24	7	18	32	25
Other	1	33	3	16	1	25	3	10	5	15	0	0	13	10

TABLE 11 (continued)

AREAS IN WHICH ORGANIZATIONS NEED ASSISTANCE IN PROVIDING CONTINUING EDUCATION, 1973 (Sheet 2 of 2)

(Questionnaire item number I. B. 6.) N= 177

GROUP NAME -- PARTIAL SAMPLE

AREAS	Libraries--academic		Libraries--public		Libraries--school		Libraries--special		Total number	Total percentage	Library schools--unaccredited	
n=	9		9		8		8		34		15	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Development of continuing education programs	2	22	5	56	2	25	1	12	10	29	8	53
Design of continuing education programs	2	22	6	67	2	25	1	12	11	32	6	40
Evaluation of effectiveness of continuing education programs	4	44	5	56	4	50	1	12	14	41	8	53
Determination of needs of target groups	3	33	2	22	1	12	1	12	7	21	7	47
Clearinghouse of information on available continuing education opportunities	1	11	4	40	3	38	1	12	9	26	7	47
Consultation with knowledgeable persons in the field	5	56	6	67	0	0	1	12	12	35	6	40
A directory of continuing education opportunities	2	22	5	56	3	38	0	0	10	29	5	33
Packaged continuing education programs (developed by someone else)	2	22	4	44	2	25	1	12	9	26	5	33
Publicity	0	0	0	0	1	12	0	0	1	3	6	40
A quality journal on continuing library and information science education	1	11	3	33	4	50	1	12	9	26	2	13
Distribution of programs of packages produced	0	0	0	0	0	0	0	0	0	0	1	7
Other	0	0	3	33	0	0	0	0	3	9	2	13

TABLE 12

Table 12 indicates that the respondent organizations in both the complete and the partial sample provide the most continuing education opportunities for librarians with the MLS degree and the second largest number of opportunities for the operating librarians (without an MLS degree). The following chart shows the specific rankings for the number of opportunities offered the different levels.

RANK ORDER OF THE NUMBER (PERCENTAGE) OF CONTINUING EDUCATION OPPORTUNITIES RESPONDENT ORGANIZATIONS PROVIDE FOR TARGET GROUPS

	Librarians MLS	Operating Librarians	Technical Information Specialists	Paraprofessionals	Technicians	Clericals	Trustees
Complete Sample	1	2	4	3	6	7	5
Partial Sample	1	2	6	4	3-5	3	7
Unaccredited Library Schools	1	2	2/3	4/5	4/5	6	7

Overall,Table 12 indicates a fairly balanced pattern of the number of opportunities being provided by responding organizations for the various levels of library personnel. The chief exceptions in the complete sample are for clericals and trustees.

Although only a small number of libraries are included in the sample, it should be noted also that the public libraries are the only respondents in the partial sample to provide continuing education opportunities for trustees.

TABLE 12

NUMBER AND PERCENTAGE OF RESPONDENT ORGANIZATIONS PROVIDING CONTINUING EDUCATION OPPORTUNITIES FOR THE TARGET GROUPS, 1973

(Questionnaire item number II. A. Column 2) N=189

TARGET GROUPS

GROUP NAME OF ORGANIZATION	n	PROFESSIONAL PERSONNEL								SUPPORTING PERSONNEL								OTHER			
		Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Other		Paraprofessionals (Library associates)		Library Technicians (Technical assistants)		Clericals		Other		Trustees		Other	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Complete Sample																					
Libraries--national	3	2	67	2	67	2	67	1	33	2	67	2	67	2	67	1	33	0	0	0	0
Library associations--national	24	15	62	15	62	8	33	5	21	8	33	7	29	2	8	1	4	2	8	3	12
Library associations--regional	4	4	100	4	100	3	75	1	25	2	50	1	25	1	25	1	25	2	50	2	50
Library associations--state	31	21	68	22	71	14	45	2	6	19	61	12	39	5	16	0	0	15	48	0	0
Library schools--accredited	40	37	92	32	80	16	40	5	12	12	30	4	10	0	0	0	0	8	20	0	0
State library agencies	38	33	87	35	92	19	50	2	53	32	84	26	68	22	58	0	0	32	84	5	13
Total number	140	112		110		62		16		75		52		32		3		59		10	
Total percentage			80		78		44		11		54		37		23		2		42		7
Partial Sample																					
Libraries--academic	9	5	56	1	11	5	56	1	11	7	78	7	78	7	78	3	33	0	0	0	0
Libraries--public	9	8	89	6	67	2	22	2	22	7	78	3	33	6	67	2	22	3	33	0	0
Libraries--school	8	8	100	8	100	3	38	2	25	2	25	3	38	1	12	1	12	0	0	1	12
Libraries--special	8	8	100	6	75	3	38	1	12	3	38	4	50	6	75	1	12	0	0	0	0
Total number	34	29		21		13		6		19		17		20		7		3		1	
Total percentage			85		62		38		18		56		50		59		21		9		3
Library schools--unaccredited	15	9	60	9	60	4	27	5	33	3	20	3	20	2	13	0	0	1	7	1	7

TABLE 13

Table 13 indicates the order of priority for continuing education the respondents think the target groups should receive on a nationwide basis over the next three to five years.

The respondents, answering this question from an individual rather than an organizational point of view, indicated a high degree of agreement regarding what groups should have priority in continuing education planning over the next three to five years.

In both the complete and the partial sample, respondents ranked MLS librarians first in priority for continuing education planning over the next three to five years, followed by operating librarians without an MLS as second, and paraprofessionals as third.

TABLE 13

ORDER OF PRIORITY FOR CONTINUING EDUCATION THAT RESPONDENTS THINK THE TARGET GROUPS SHOULD RECEIVE ON A NATIONWIDE BASIS OVER THE NEXT 3-5 YEARS, 1973

(Questionnaire item number II. A. Column 3) N=189

TARGET GROUPS

GROUP NAME OF ORGANIZATION	n	PROFESSIONAL PERSONNEL				SUPPORTING PERSONNEL				OTHER	
		Librarians (With MLS or more)	Operating Librarians (Without MLS)	Technical Information Specialists (Without MLS)	Other	Paraprofessionals (Library associates)	Library Technicians (Technical assistants)	Clericals	Other	Trustees	Other
Complete Sample											
Libraries--national	3	1	2	4	7	5/6	3	5/6	8-10	8-10	8-10
Library associations--national	24	2	1	5	9	3	4	7	10	6	8
Library associations--regional	4	3	1	2	8	4	5	6	9/10	7	9/10
Library associations--state	31	2	1	5	10	3	4	7	8	6	9
Library schools--accredited	40	1	2	3	8	4	5	7	9	6	10
State library agencies	38	1	2	6	10	3	5	7	9	4	8
Overall rank by complete sample		1	2	4	9	3	5	7	10	6	8
Partial Sample											
Libraries--academic	9	1	5	6	9	2	3	4	7	8	10
Libraries--public	9	1	2	6	9	3	7	5	8	4	10
Libraries--school	8	1	2	3	7	4	5/6	5/6	10	9	8
Libraries--special	8	1	2	5	7	4	6	3	9/10	8	9/10
Overall rank by libraries		1	2	4	7	3	6	5	9	8	10
Library schools--unaccredited	15	1	2	5	3/4	3/4	6	7	10	8	9

* 1=highest priority

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TABLES 14, 14A

Questionnaire item number II. B., Column 1 asked the respondents to list, for each target group of library and information science personnel, the continuing education needs they felt were either not being met or were being met poorly at the present time. The results are presented in Table 14.

This question was purposefully asked as an open-ended question. The Project Team did not want to influence the respondents by presenting a structured list that might narrow the range of answers. The consequence has been a very long list of needs, with many of them being reported only once or twice by the respondents. The top five, in rank order, are "Updating," "Management," "Human Relations," "Automation," and "Non-Print Media."

Table 14A presents the five needs that ranked highest, based on the percentage of respondents supporting the need, for each of the target groups.

In addition to showing clusters of major content needs, Table 14, and Table 15 (which gives respondents perceptions of content areas for which there will be the greatest need over the next five years), show the wide range of specific competencies needed, now and in the future, as perceived by the respondents. This type of information is essential for developing competency-based programs and modules, and also seems to imply that many needs, now unmet, could be provided for more economically by home study programs than by traditional courses, workshops, and institutes, which necessitate the attendance of the individual learner in a group situation.

Under the category "Other" target groups, the respondents listed library personnel doing specialized tasks needing continuing education: library science faculty, business managers, staff artists, public information specialists, media specialists, library systems analysts, curators, shelvers, custodial engineers, urban planners, authors, publishers, and teachers. The type of personnel mentioned the most frequently was media specialists. The continuing education needs that the respondents felt these personnel had were generally similar to those attributed to the personnel listed in Table 14.

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TABLE 14

CONTINUING EDUCATION NEEDS OF TARGET GROUPS THAT ARE NOT BEING MET OR ARE BEING MET POORLY CURRENTLY, AS INDICATED BY RESPONDENTS, 1973 (Sheet 1 of 8)

(Questionnaire item number II B. Column 1) N=146

	TARGET GROUPS															
	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
NEEDS	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	*No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Academic Education									1						1	
Acquisition					1		1				1				3	
Acquisition Techniques			2												2	
Alternative Avenues of Career Advancement					2		1		2		3				8	
Automation	20	3	10	5/6	9	2	3		5	3/4	3		1		51	4
Basic Library Skills											2				2	
Basic Library Skills and Philosophy			10	5/6											10	
Basic Office Etiquette											1				1	
Basic Skills							6	5-7	3						9	
Better Organized Programs with Higher Standards							1		1						2	
Bibliography			1						1						2	
Broader Education and Perspective							4								4	
Broadening of Education					2										2	
Broader Perspective									3		2				5	
Budgeting	8		5										4		17	
Business Practices					1										1	
Business Practices and Skills											1				1	
Cable TV (CATV)	6		3		1										10	
Career Counseling	2		1		1		1		1		1				7	
Cataloging Techniques							3								3	

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*Only top five ranks are indicated.

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TABLE 14 (continued)

CONTINUING EDUCATION NEEDS OF TARGET GROUPS THAT ARE NOT BEING MET OR ARE BEING MET POORLY CURRENTLY, AS INDICATED BY RESPONDENTS, 1973 (Sheet 2 of 8)

Questionnaire item number II. B. Column 1) N=146

	TARGET GROUPS															
	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
NEEDS	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Change	3		3		1		2		1				1		11	
Circulation							1		1		2				4	
Collective Bargaining Information	1														1	
Communication Skills									1		2				3	
Communications Theory	5		2		1		2						1		11	
Community Awareness													1		1	
Coordination of [their] Programs					1										1	
Courses							8		2		2				12	
Courses Leading to Degree or Certification							4								4	
Creative Answers to Problems			1												1	
Diversification			7		3		1		3						14	
Diversification (Within Field)	7														7	
Don't know	2		1		1		1								5	
Educational Video Communication	1														1	
Enrichment Courses	2		1				1								4	
Equipment Operation and Maintenance					1				1						2	
Equipment Selection					1										1	
Evaluation							8	2/3			1		1		10	
Evaluation and Measurement	6		2		1										9	
Expanders of Library Knowledge													1		1	

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TABLE 14 (continued)

CONTINUING EDUCATION NEEDS OF TARGET GROUPS THAT ARE NOT BEING MET OR ARE BEING MET POORLY CURRENTLY, AS INDICATED BY RESPONDENTS, 1973 (Sheet 3 of 8)

(Questionnaire item number II. B. Column 1) N=146

NEEDS	TARGET GROUPS															
	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Exposure to Problems and Issues													1		1	
Extension Courses	2														2	
Extension Courses in Non-Urban Centers			2		2										4	
Formal C.E. Programs	2														2	
Formal C.E. Programs Leading to Advanced Degrees			1		1										2	
General Knowledge													1		1	
Group Dynamics			1												1	
Higher Degrees					1										1	
Human Relations	16	5	12		5		8	2/3	4	5-7	6		2		53	3
Humanistic Literature	1														1	
Importance of Trustee Activity													2		2	
Incentive Programs	1														1	
Information Science	4														4	
Information Storage and Retrieval					2										2	
In-Service Training	1		1		1		3		4	5-7	8	3			18	
Intellectual Freedom													1		1	
Interdisciplinary Approaches to Librarianship	1														1	
Know-How in Dealing with Boards or Governing Groups			1												1	

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TABLE 14 (continued)

CONTINUING EDUCATION NEEDS OF TARGET GROUPS THAT ARE
NOT BEING MET OR ARE BEING MET POORLY CURRENTLY,
AS INDICATED BY RESPONDENTS, 1973 (Sheet 4 of 8)

(Questionnaire item number II. B. Column 1) N=146

	TARGET GROUPS															
	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
NEEDS	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Lack of Support by the Profession	2		3		2		1								8	
Lack of Support for Continuing Education											1		1		2	
Learning Theory	1		1		1										3	
Legal Framework of Duties	1												1		2	
Legislative Know-how	6		5										6	3/4	17	
Less Distinction Between Professional and Supporting							1								1	
Librarianship					6	3-5	5								11	
Library Cooperation and Networking	8		8		3				1				2		22	
Library Effectiveness Studies	1														1	
Library Functions and Interrelationships											11	1			11	
Library Goals and Functions													13	1	13	
Library Legislation													5	5/6	5	
Library-Related Workshops					1										1	
Library Skills									4	5-7					4	
Life-Long Learning	3				1										4	
Literature of Various Disciplines			2		1										3	
Local C.E. Opportunities	1														1	
Management	34	1	18	2	6	3-5	5		2						65	2

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TABLE 14 (continued)

CONTINUING EDUCATION NEEDS OF TARGET GROUPS THAT ARE NOT BEING MET OR ARE BEING MET POORLY CURRENTLY, AS INDICATED BY RESPONDENTS, 1973 (Sheet 5 of 8)

(Questionnaire item number II. B. Column 1) N=146

	TARGET GROUPS															
	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
NEEDS	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Management (Of Libraries)													4		4	
Means of Evaluating Service Organization													1		1	
Micrographics	1														1	
Municipal Law													1		1	
Need to Fulfill Degree Requirements					2										2	
Needs all Unmet	2		2		2		2		2		4		2		16	
Needs not Determined	2		2												4	
Needs not Felt	1														1	
New Materials	3		3		1		2								9	
New Techniques	5		5		3		3								16	
New Technology	7		4		5		3		2				2		23	
None	1		1		1										3	
Non-Print Media	17	4	15	3	6	3-5	3		2		2				45	5
Non Traditional Educational Opportunities									1						1	
Opportunities to Advance Through Degree Programs			11	4											11	
Opportunity to Share in Present Educational Program									2						2	
Orientation	1		1										2		4	

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TABLE 14 (continued)

CONTINUING EDUCATION NEEDS OF TARGET GROUPS THAT ARE NOT BEING MET OR ARE BEING MET POORLY CURRENTLY, AS INDICATED BY RESPONDENTS, 1973 (Sheet 6 of 8)

(Questionnaire item number II. B. Column 1) N=146

NEEDS	TARGET GROUPS															
	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Outreach	2		1												3	
Paraprofessional Use	1		1										1		3	
Performance Review	1		1		1				2		2				7	
Personnel													2		2	
Personnel Training	3														3	
Ph.D. in Library and Information Science					1										1	
Planning	6		6				1				1		3		17	
Practical Application of Technical Skills					1										1	
Program Planning			2												2	
Program Techniques							1								1	
Programs Leading to Degrees									2						2	
Programs Planned for this Group											2				2	
Programs Putting the Individual Situations into Larger Perspective			1												1	
Public Relations	7		6				4		1		7	4/5	3		28	
Public Service Concepts											1				1	
Public Services							1		1						2	
Publishing	1														1	
Reference											2				2	
Reference Skills					2				2						4	
Reference Techniques			3				7	4							10	
Refresher Courses	6		4		5		4		2		2				23	
Representation on Trustee Boards of User Needs, Locally and Statewide													1		1	

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TABLE 14 (continued)

CONTINUING EDUCATION NEEDS OF TARGET GROUPS THAT ARE NOT BEING MET OR ARE BEING MET POORLY CURRENTLY, AS INDICATED BY RESPONDENTS, 1973 (Sheet 7 of 8)

(Questionnaire item number II. B. Column 1) N=146

NEEDS	TARGET GROUPS															
	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Research	2														2	
Role of the Library	1		1		1		1		1				5	5/6	10	
Separate Workshops									1						1	
Service to Special Groups	2		1				1		1						5	
Short Courses	1								1		1				3	
Specialized Training	3														3	
Statistics	2		1												3	
Story Telling and Reading Aloud							1								1	
Study of Emerging Areas of Librarianship	1		1												2	
Subject Specialization	6		3		1		2								12	
Sufficient C.E. Available	4		3		2										9	
Supervision Skills	5		5		1		6	5-7	5	3/4					22	
Sustained C.E. Programs							1								1	
Systems Analysis	3		5		4								1		13	
Technical Processes									1						1	
Technical Processing							1								1	
Technical Skills											1				1	
Training for Advancement			1		1		1								3	
Training to Make Value Judgments							1								1	
Trustee's Role, Responsibilities and Duties													11	2	11	

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TABLE 14 (continued)

CONTINUING EDUCATION NEEDS OF TARGET GROUPS THAT ARE NOT BEING MET OR ARE BEING MET POORLY CURRENTLY, AS INDICATED BY RESPONDENTS, 1973 (Sheet 8 of 8)

(Questionnaire item number II. B. Column 1) N=146

	TARGET GROUPS															
	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
NEEDS	Librarians (With MLS or more)		Operating Librarians (Without MLS,		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Tuition Reimbursement (Other than Organization Budget)							1								1	
Unanswerable	3		4												7	
Understanding by Administration of Need for Released Time							1		1						2	
Understanding by Library Community (and coworkers)					1										1	
Understanding of Need for C.E.							1		1						2	
Understanding of Role					2		1		1						4	
Understanding of Universal Need for C.E.											1				1	
Updating	30	2	22	1	16		11	1	6	1/2	10	2	6	3/4	101	1
Upgrading	3		5		2		6	5-7	6	1/2	3				25	
Urban Planning	1														1	
User Needs	4		7		1		1		1		2				16	
Vocabulary							2		1		2				5	

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TABLE 14A

FIVE HIGHEST RANKINGS OF CONTINUING EDUCATION NEEDS OF TARGET GROUPS THAT ARE NOT BEING MET OR ARE BEING MET POORLY CURRENTLY, AS INDICATED BY RESPONDENTS, 1973

Questionnaire item number II. B. Column 1) N= 146

	TARGET GROUPS															
	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
NEEDS	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Automation	20	3	10	5/6	9	2	3		5	3/4	3		1		51	4
Basic Library Skills and Philosophy			10	5/6											10	
Basic Skills							6	5-7	3						9	
Evaluation							8	2/3			1		1		10	
Human Relations	16	5	12		5		8	2/3	4	5-7	6	5	2		53	3
In-Service Training	1		1		1		3		4	5-7	8	3			18	
Legislative Know-how	6		5										6	3/4	17	
Librarianship					6	3-5	5								11	
Library Functions and Interrelationships											11	1			11	
Library Goals and Functions													13	1	13	
Library Legislation													5	5/6	5	
Library Skills									4	5-7					4	
Management	34	1	18	2	6	3-5	5		2						65	2
Non-Print Media	17	4	15	3	6	3-5	3		2		2				45	5
Opportunities to Advance Through Degree Programs			11	[illegible]											11	
Public Relations	7		6				4		1		7	4	3		28	
Reference Techniques			3				7	4							10	
Role of the Library	1		1		1		1		1				5	5/6	10	
Supervision Skills	5		5		1		6	5-7	5	3/4					22	
Trustee's Role, responsibilities and duties													11	2	11	
Updating	30		22	1	16	1	11	1	6	1/2	10	2	6	3/4	101	1
Upgrading	3		5		2		6		6	1/2	3				25	

TABLES 15, 15A

Questionnaire item II. B., Column 2 asked the respondents to list, for each target group of library and information science personnel, the specific content areas of continuing education they felt had the highest priority over the next three to five years. The results are presented in Table 15.

Table 15A presents the five content areas that ranked highest, based on the percentage of respondents reporting the area, for each of the target groups. Listed in rank order for all target groups, these are: "Human Relations," "Non-Print Media," "Management," "Automation," and "Public Relations."

Compared with the top ranking content needs presented in Table 14A, there is little change, except that the highest ranking current need has been dropped and "Public Relations" moved into fifth place. The following chart shows the comparison by rank.

Rank	Now	Five Years from Now
1	Updating	Human Relations
2	Management	Non-Print Media
3	Human Relations	Management
4	Automation	Automation
5	Non-Print Media	Public Relations

This question was asked as an open-ended question, as was the previous question (II. B., Column 1). It was felt that a structured list of areas might narrow the range of answers.

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TABLE 15

SPECIFIC CONTENT AREAS OF CONTINUING EDUCATION THAT HAVE THE HIGHEST PRIORITY OVER THE NEXT THREE TO FIVE YEARS AS INDICATED BY RESPONDENTS, 1973 (Sheet 1 of 7)

(Questionnaire item number II. B. Column 2) N=164

TARGET GROUPS

SPECIFIC CONTENT AREAS	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank*	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Academic Background							1				3				4	
Accounting											1				1	
Acquisitions							1								1	
Adult Basic Education			1												1	
Adult Services					1										1	
Aggressiveness in Pursuing Library Welfare													1		1	
Analytical Techniques	1														1	
Automation	73	2	32	4	37	1	24	3	25	2	12	2/3	2		205	4
Autonomy													1		1	
Basic Information									1						1	
Basic Library Skills											2				2	
Basic Library Skills and Philosophy					11	5									11	
Basic Required Degree Courses					1										1	
Behavioral Sciences	1														1	
Bibliographical Control					2										2	
Bibliography	4		3				2		2						11	
Book Knowledge					1										1	
Book Selection			1				1								2	
Broader Education					1		1								2	
Broader Education and Perspective									3						3	
Broader Perspective											1				1	
Budgeting	9		3				1						9		22	
Business Practices									2						2	
Business Procedures											1				1	
Cable TV (CATV)	4		5		3										12	

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*Only top five priorities are indicated.

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TABLE 15 (continued)

SPECIFIC CONTENT AREAS OF CONTINUING EDUCATION THAT HAVE THE HIGHEST PRIORITY OVER THE NEXT THREE TO FIVE YEARS AS INDICATED BY RESPONDENTS, 1973 (Sheet 2 of 7) N=164

(Questionnaire item number II. B. Column 2)

TARGET GROUPS

	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
SPECIFIC CONTENT AREAS	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Cataloging							5		4						9	
Change	1		3				3		3		1		6		17	
Circulation							1								1	
Circulation Systems											1				1	
CLEP-Type Exams			1						1						2	
Clerical Skills											6	5			6	
Collection Development	1		1												2	
Communication Skills											4				4	
Communications Theory	10		10		3		2		2				4		31	
Community Activity	1		1												2	
Community Planning							1								1	
Community Studies													5		5	
Core Courses in Librarianship			3				2								5	
Curriculum			1												1	
Curriculum Development	2														2	
Diversification	1						1								2	
English Language Skills											2				2	
Equipment Operation and Maintenance									1						1	
Equipment Selection			1		1										2	
Evaluation and Measurement	5		4		1										10	

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TABLE 15 (continued)

SPECIFIC CONTENT AREAS OF CONTINUING EDUCATION THAT HAVE THE HIGHEST PRIORITY OVER THE NEXT THREE TO FIVE YEARS AS INDICATED BY RESPONDENTS, 1973 (Sheet 3 of 7)

(Questionnaire item number II. B. Column 2) N=164

	TARGET GROUPS															
	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
SPECIFIC CONTENT AREAS	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Federal and State Funding	1		1		1		1								4	
Filing									1						1	
General Knowledge													1		1	
Group Dynamics	1														1	
Human Relations	66	3	48	3	20	3	38	1	23	3	26	1	11	5	232	1
Humanizing Education	1														1	
Information Centers	1		1		1										3	
Information Science	4		2		5		4		1						16	
Information Storage and Retrieval	4		3		3		1								11	
Information Systems							1		1						2	
In-Service Training											1				1	
Intellectual Freedom	3		2										6		11	
Interagency Planning	1														1	
Interdisciplinary Studies	1														1	
Job Enrichment	1														1	
Labor Relations			2										1		3	
Labor Unions													1		1	
Lack of Agreement on Priorities													1		1	
Languages	1														1	
Leadership Training	1														1	
Learning Theory	4		2		2		1		1		1		1		12	
Legal Problems													1		1	
Legislative Know-How	14		7		1		1						15	1	38	
Librarians' Responsibilities													1		1	

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TABLE 15 (continued)

SPECIFIC CONTENT AREAS OF CONTINUING EDUCATION THAT HAVE THE HIGHEST PRIORITY OVER THE NEXT THREE TO FIVE YEARS AS INDICATED BY RESPONDENTS, 1973 (Sheet 4 of 7)

(Questionnaire item number II. B. Column 2) N=164

	TARGET GROUPS															
	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
SPECIFIC CONTENT AREAS	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Library Cooperation and Networking	11		8		7		1		3		1		3		34	
Library Goals and Functions													7		7	
Library Goals and Organization											5				5	
Library Legislation													6		6	
Library Operations											7	4			7	
Library Organizational Structure													1		1	
Library Security	1		1												2	
Library Skills and Philosophy			10				13	4	7	5					30	
Literature	1		1		1										3	
Management	106	1	69	1	15	4	9		6		2		12	3/4	219	3
Management of A & I Services	1		1		1										3	
Management of Learning Resources			1												1	
Management of Learning Resources for GS1410	1														1	
Media Center Management	1		1		1										3	
Microforms	1		1		1		1		1						5	
Micrographics	1		1		1		1								4	
New Materials	3		3				2		1		2				11	
New Technology	4		4		4		2		4		4		1		23	
Non-Print Media	52	4	51	[illegible]	31	2	35	2	27	1	12	2/3	12	3/4	220	2
Not Sure											1				1	

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TABLE 15 (continued)

SPECIFIC CONTENT AREAS OF CONTINUING EDUCATION THAT HAVE THE HIGHEST PRIORITY OVER THE NEXT THREE TO FIVE YEARS AS INDICATED BY RESPONDENTS, 1973 (Sheet 5 of 7)

(Questionnaire item number II. B. Column 2) N=164

	TARGET GROUPS							
	PROFESSIONAL PERSONNEL			SUPPORTING PERSONNEL				TOTAL
SPECIFIC CONTENT AREAS	Librarians (With MLS or more)	Operating Librarians (Without MLS)	Technical Information Specialists (Without MLS)	Paraprofessionals (Library associates)	Library Technicians (Library assistants)	Clericals	Trustees	Total
	No. Rank	No. Rank	No. Rank	No. Rank	No. Rank	No. Rank	No. Rank	No. Rank
Office Policies						1		1
Open Schools and Universities	1	1	1					3
Operation of Machines						2		2
Opportunities for Advancement				2	2	2		6
Opportunity to Advance to B.A.				2	1			3
Opportunity to Advance to MLS		3	1	2				6
Organization of Materials						3		3
Organization Skills				2				2
Organizing							1	1
Orientation			1	1	1	1	2	6
Outreach	2	2	1	1	1			7
Participatory Management	2	1	1	1	1	1		7
Personnel	2	2					1	5
Planning	5	6	3	1	1	1	4	21
Policy Setting							2	2
Preservation	1	1						2
Problem Solving	1	1						2
Production Techniques					1			1
Professional Enlargement					1			1
Professionalism	1	2		2				5

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TABLE 15 (continued)

SPECIFIC CONTENT AREAS OF CONTINUING EDUCATION THAT HAVE THE HIGHEST PRIORITY OVER THE NEXT THREE TO FIVE YEARS AS INDICATED BY RESPONDENTS, 1973 (Sheet 6 of 7)

Questionnaire item number II. B. Column 2) N=164

TARGET GROUPS

SPECIFIC CONTENT AREAS	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Program Techniques							1								1	
Proposal Writing and "Grantsmanship"	1														1	
Public Relations	18	5	13	5	2		9	5	4		5		14	2	65	5
Public Services							1		1						2	
Publicity	1		2		2		3		1				1		10	
Readers Advisory Group Work	1		1		1										2	
Reference	1		2												3	
Reference Skills							8		5		1				14	
Reference Sources and Skills					3										3	
Research Methods	3														3	
Revenue Sharing													1		1	
Role of the Library	2		1				2		1		1		8		15	
Service to Special Groups	3		2		1		1		1		1		1		10	
Staff Utilization													1		1	
Standards							2		1		1		2		6	
Statistics	2														2	
Subject Specialization	3				4		3		2						12	
Supervision Skills	5		1		1		7		5						19	
Systems Analysis	9		6		3		1						2		21	
Technical Processing							2		2						4	
Technical Services			1												1	
Technical Skills							4		3						7	
Trustee/Librarian Relationships													1		1	

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TABLE 15 (continued)

SPECIFIC CONTENT AREAS OF CONTINUING EDUCATION THAT HAVE THE HIGHEST PRIORITY OVER THE NEXT THREE TO FIVE YEARS AS INDICATED BY RESPONDENTS, 1973 (Sheet 7 of 7)

(Questionnaire item number II. B. Column 2) N=164

TARGET GROUPS

SPECIFIC CONTENT AREAS	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Trustee's Role in Securing Funds													4		4	
Turstee's Role, Responsibilities and Duties													7		7	
Typing									1						1	
Understanding of Role							2		2		3				7	
Updating	6		2		5		6		9	4	3		6		37	
Upgrading	1		1				1				3				6	
Urban Library Service	1														1	
User Needs	5		3				1								9	
Utilization of Resources					1										1	
Volunteer Programs							1								1	
Work Simplification							1								1	
Working Conditions	1		1										1		3	

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TABLE 15A

FIVE HIGHEST RANKINGS OF SPECIFIC CONTENT AREAS OF CONTINUING EDUCATION THAT HAVE THE HIGHEST PRIORITY OVER THE NEXT THREE TO FIVE YEARS, AS INDICATED BY RESPONDENTS, 1973

Questionnaire item number II. B. Column 2) N=164

SPECIFIC CONTENT AREAS	TARGET GROUPS															
	PROFESSIONAL PERSONNEL						SUPPORTING PERSONNEL								TOTAL	
	Librarians (With MLS or more)		Operating Librarians (Without MLS)		Technical Information Specialists (Without MLS)		Paraprofessionals (Library associates)		Library Technicians (Library assistants)		Clericals		Trustees		Total	
	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank
Automation	73	2	32	4	37	1	24	3	25	2	12	2/3	2		205	4
Basic Library Skills and Philosophy					11	5									11	
Clerical Skills											6	5			6	
Human Relations	66	3	48	3	20	3	38	1	23	3	26	1	11	5	232	1
Legislative Know-How	14		7		1		1						15	1	38	
Library Operations											7	4			7	
Library Skills and Philosophy			10				13	4	7	5					30	
Management	106	1	69	1	15	4	9		6		2		12	3/4	219	3
Non-Print Media	52	4	51	2	31	2	35	2	27	1	12	2/3	12	3/4	220	2
Public Relations	18	5	13	5	2		9	5	4		5		14	2	65	5
Updating	6		2		5		6		9	4	3		6		37	

TABLE 16

Table 16 indicates the policies concerning continuing education that respondents think employing libraries should provide for each target group.

For professionals, the policies most often checked were time-off to attend annual professional conferences, professional meetings, workshops, and seminars. For all those categories of supporting personnel, the policy most often mentioned by the respondents was "provision for in-house workshops on specific topics." The difference in the two priorities could reflect an opinion that professionals should go somewhere else (away from work) to receive continuing education opportunities, while paraprofessionals and other supporting personnel should stay at work and have someone bring continuing education opportunities to them.

"Paying tuition" for courses received a low ranking (24th for professional, 21st for supporting personnel and 18th for trustees). On the other hand, "tuition for institutes, workshops, seminars, and tutorials" ranked first for trustees, fourth for the three categories of supportive personnel and seventh for paraprofessional personnel.

One interesting statistic brought out in Table 16 is discussed widely in the literature and comes up regularly in meetings concerned with continuing professional education. The question is: "Should continuing education work be required for promotion?"

For all target groups, less than 50 percent of the respondents thought it should be required. Specifically, 47 percent of the respondents thought it should be required for professionals; 41 percent for paraprofessionals; 33 percent for library technicians; and 20 percent for clericals.

A related question is, " Should continuing education be required for salary increase?" Still less of the respondents thought this should be a requirement. Specifically, 39 percent of the respondents thought it should be required for professionals; 29 percent for paraprofessionals; 23 percent for library technicians; and 18 percent for clericals.

Perhaps the clearest way to show the difference in policies recommended by the respondents for different target groups is to display them in rank order (top five for each group) for the various target groups.

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Target Groups					
		Supportive Staff			
Policies	Professionals	Paraprofessionals	Library Technicians	Clericals	Trustees
Tuition for:					
Institutes, workshops, seminars, tutorials	7	4	4	4	1
Time off to attend:					
Annual professional conferences	1/2/3	7	11	13	11/12
Professional meetings	1/2/3	8	19	15-17	27-31
Committees of professional associations	4	14	17	15-17	14
Workshops, institutes, seminars	1/2/3	2	2	3	5/6
Classes	14/15	5	6	6	15
Expenses (Travel and/or per diem) paid to:					
At least one professional meeting annually	5	16-18	20	23/24	11/12
Provision for:					
In-house lectures, seminars, conferences	6	3	3	2	3
In-house workshops on specific topics	8	1	1	1	2
Staff development of continuing education committee to participate in planning and governance of the opportunities provided	10	6	5/6	5	4
In-house planning by specific groups on continuing education	14/15	11	8	7	5/6

* 1 = highest rank.

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TABLE 16

POLICIES ON CONTINUING EDUCATION RESPONDENTS THINK EMPLOYING LIBRARIES SHOULD PROVIDE FOR EACH TARGET GROUP, AS INDICATED BY PERCENTAGE OF RESPONDENTS, 1973

(Questionnaire item number III. 1.) N=177

TARGET GROUPS

POLICIES	Pro-fessionals		Parapro-fessionals		Library tech-nicians		Clericals		Trustees	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
TUITION FOR:										
Courses taken for credit	39	24/25	32	22	28	21	20	19/20	11	18/19
Courses taken for credit, but only if job related	47	19/20	49	16-18	41	13	39	10	14	17
Non-credit courses	23	26	31	23	18	24	15	23/24	11	18/19
Non-credit courses, but only if job related	45	22	41	19/20	40	14/15	38	11	17	16
Institutes, workshops, seminars, tutorials	88	7	75	4	69	4	59	4	51	1
Other	3	27	1	28-30	1	28-30	0	30/31	0	27-31
LEAVES OF ABSENCE:										
Educational leaves without pay	54	18	49	16-18	40	14/15	28	14	8	20
Educational leaves with pay	61	17	34	21	25	22	18	21/22	5	21/22
Sabbatical leaves with full pay	46	21	11	26	7	26	5	26	2	25
Sabbatical leaves with partial pay	44	23	17	25	14	25	8	25	3	24
Other	0	31	1	28-30	1	28-30	1	28-30	1	26
TIME OFF TO ATTEND:										
Annual professional conferences	98	1-3	67	7	47	11	29	13	31	11/12
Professional meetings	98	1-3	66	8	30	19	26	15-17	0	27-31
Committee or task force meetings of professional associations	94	4	58	14	36	17	26	15-17	21	14
Classes	76	14/15	69	5	62	6	54	6	18	15
Workshops, institutes, seminars, tutorials	98	1-3	82	2	78	2	66	3	39	5/6
Other	1	29	1	28-30	1	28-30	2	27	0	27-31
CONTINUING EDUCATION REQUIREMENTS:										
Continuing education work is required for promotion	47	19/20	41	19/20	33	18	20	19/20	5	21/22
Continuing education work is required for salary increase	39	24/25	29	24	23	23	18	21/22	4	23
EXPENSES (TRAVEL AND/OR PER DIEM) PAID TO:										
At least one professional conference annually	90	5	49	16-18	29	20	15	23/24	31	11/12
Professional meetings if participant in program or committee	86	9	60	12	38	16	25	18	33	9/10
Institutes	81	11-13	63	10	50	11	26	15-17	33	9/10
Workshops, seminars, tutorials	81	11-13	66	8/9	58	7	40	9	38	7/8
Other	2	28	2	27	2	30	1	28/29	0	27-31
PROVISION FOR:										
In-house lectures, seminars, conferences	89	6	81	3	74	3	67	2	47	3
In-house workshops on specific topics	87	8	85	1	81	1	74	1	48	2
Discussions with outside consultants	81	11-13	51	15	45	12	34	12	38	7/8
Staff development of continuing education committee to participate in planning and governance of the opportunities provided	83	10	68	6	62	5/6	55	5	42	4
In-house planning by specific groups on continuing education	74	16	59	13	54	9	45	8	29	13
Systematic means of discovering continuing education needs	76	14/15	61	11	55	8	51	7	39	5/6
Other	0	30/31	0	31	0	31	0	30/31	0	27-31

* 1=highest rank

TABLE 17

Table 17 indicates the number of libraries or library systems currently operating with a written policy statement regarding continuing education. Forty-five percent of the employing libraries in the partial sample have a written statement of policy. However, 93 percent of the respondents whose organizations do not have a formal continuing education policy do make provision for continuing education.

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TABLE 17

NUMBER AND PERCENTAGE OF RESPONDENT ORGANIZATIONS PROVIDING CONTINUING EDUCATION WITH OR WITHOUT WRITTEN POLICIES, 1973

(Questionnaire item number III. 2.a. and b.) N=34

GROUP NAME*	POLICIES					
	The organization has written policies for continuing education provisions for library personnel			The organization has no written policy for continuing education but makes provision for it		
	n	No.	%	n	No.	%
Complete Sample						
Libraries--national	3	1	33	1	1	100
Total number	3	1		1	1	
Total percentage			33			100
Partial Sample						
Libraries--academic	8	4	50	4	3	75
Libraries--public	9	5	56	4	4	100
Libraries--school	7	2	29	2	2	100
Libraries--special	7	3	43	4	4	100
Total number	31	14		14	13	
Total percentage			45			93

* Only those groups listed in this Table were asked to respond to this questionnaire item.

TABLE 18

Table 18 indicates the number of respondent organizations among the library associations, library schools, and state library agencies promoting the idea that libraries and library systems should have a written policy for continuing education. There seems to be a wide range of opinion attached to the importance of a written continuing education policy. Thus, while 74 percent of accredited library schools, 75 percent of unaccredited library schools, and 68 percent of the state library agencies favored written policy, only 27 percent of the respondent state library associations and 32 percent of the national library associations promoted the importance of written policy statements regarding continuing education.

Overall, only slightly more than half (52 percent) of those responding in the complete sample indicated that they promoted the idea that there should be written policy statements regarding continuing education.

It is interesting to note that the library associations had a low percentage regarding the promotion of written employments statements. In the engineering professions, it was a coalition of 15 engineering associations which assumed leadership in adopting guidelines for the professional employment for engineers and scientists , including a section on professional development policies of the employing organization (Morse, 1973).

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TABLE 18

NUMBER AND PERCENTAGE OF RESPONDENT ORGANIZATIONS PROMOTING THE IDEA THAT EMPLOYING LIBRARIES OR LIBRARY SYSTEMS SHOULD HAVE WRITTEN STATEMENTS DESCRIBING THEIR POLICIES FOR CONTINUING EDUCATION

(Questionnaire item number III.3.) N=134

GROUP NAME*	n	NUMBER	PERCENTAGE
Complete Sample			
Library associations--national	19	6	32
Library associations--regional	2	0	0
Library associations--state	30	8	27
Library schools--accredited	34	25	74
State library agencies	37	25	68
Total number	122	64	
Total percentage			52
Partial Sample			
Library schools--unaccredited	12	9	75

*Only the groups listed in this table were asked to respond to this questionnaire item.

TABLE 19

Table 19 indicates the extent to which respondents feel policies on continuing education motivate library personnel. A large majority of respondents in the complete sample (81 percent) felt that the continuing education policies listed in questionnaire item III. 1 are either strongly or moderately motivating for library personnel. It would appear, then, that most respondents felt that providing continuing education opportunities through the use of time-off, provision for workshops, and tuition for course work policies do indeed motivate library personnel to engage in life-long learning.

The implication of Table 19 is that efforts should be made to promote the use of written policies in organizations relative to participation in continuing education.

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TABLE 19

EXTENT TO WHICH POLICIES AS LISTED IN TABLE B.18 MOTIVATE LIBRARY PERSONNEL TO UNDERTAKE FURTHER EDUCATION, AS INDICATED BY NUMBER AND PERCENTAGE OF RESPONDENT ORGANIZATIONS, 1973

(Questionnaire item number III.4.) N=153

GROUP NAME	n	EXTENT OF MOTIVATION							
		Strongly motivating		Moderately motivating		Slightly motivating		Do not motivate	
		No.	%	No.	%	No.	%	No.	%
Complete Sample									
Libraries--national	3	1	33	0	0	1	33	1	33
Library associations--national	13	5	38	5	38	1	8	2	15
Library associations--regional	4	2	50	0	0	2	50	0	0
Library associations--state	27	9	33	16	59	2	7	0	0
Library schools--accredited	35	20	57	12	34	3	9	0	0
State library agencies	38	17	45	10	26	10	26	1	3
Total number	120	54		43		19		4	
Total percentage			45		36		16		3
Partial Sample									
Libraries--academic	5	1	20	2	40	0	0	0	0
Libraries--public	7	3	43	4	80	2	40	0	0
Libraries--school	5	2	40	3	60	0	0	0	0
Libraries--special	3	2	50	2	50	2	50	0	0
Total number	20	8		11		4		0	
Total percentage			38		52		12		0
Library schools--unaccredited	13	6	46	6	46	1	8	0	0

TABLES 20-25

Tables 20 - 25 refer to questionnaire item IV -- Modes of Continuing Education. Of the 27 modes identified in the questionnaire, the modes most often used or provided by the respondents of the complete sample are indicated in Table 20. The two highest ranking modes are:

1. Attending professional meetings (88 percent of the respondents listed this item)
2. Participating in professional committees or task forces (88 percent of the respondents listed this item)

The modes listed least often, thus receiving the lowest rank, were:

1. Provision of materials for home study (12 percent of the respondents listed this item; it ranked 26th)
2. Correspondence courses (nine percent of the respondents listed this item; it ranked 27th)

In terms of the effectiveness among the most often used modes of education, the following ten modes appear to be "successful," as indicated in Tables 22 and 24 by respondents of the complete sample:

Modes	Percentage of Respondents Who Used the Mode	Percentage of Respondents Who Found it to be Among the 5 Most Effective Modes Used
Professional meetings	88	57
Professional committee	88	43
Workshops	81	74
Oral or written reports	61	24
Writing papers	59	27
Institutes	57	67
Research	57	19
Time for reading	50	33
Teaching others	50	22

Table 24 illustrates that among the modes not being used or provided by the complete sample respondents, the following were most often chosen as "would like to have used or provided:"

1. short intensive courses
2. institutes
3. invited conferences
4. university credit courses designed for the continuing education student
5. a selective dissemination system
6. attending professional meetings
7. oral or written reports
8. participation in professional committees
9. travelling programs
10. internships

It should also be noted that several respondents took the time to comment that they have found that the effectiveness of any mode is directly related to the objectives of the training or course and to the motivation of the student. Thus, the choice of mode must be based upon the desired objectives as well as the makeup of the target population.

The breakdown by type of respondent group indicates the various groups do not all use or provide the same modes. For instance, 46 percent of the state library agencies use of provide "in-house all day staff meetings" while no one of the regional library association respondents uses or provides such meetings. "Invisible colleges" are used or provided by 75 percent of the regional library associations as compared to 26 percent of the state library agencies.

There seems to be little or no significant difference between the complete and partial sample groups with respect to the assessment of the effectiveness of various modes presented in Tables 22 and 23.

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TABLE 20

MODES OF CONTINUING EDUCATION ORGANIZATIONS HAVE USED OR PROVIDED DURING THE PAST YEAR: COMPLETE SAMPLE, 1973 (Sheet 1 of 2)

(Questionnaire item number IV. Column 1) N=137

MODES	GROUP NAME: Libraries --national		Library associations --national		Library associations --regional		Library associations --state		Library schools --accredited		State library agencies		TOTAL		RANK
n =	3		22		4		30		39		39		137		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
COURSE WORK MODES															
University credit courses open to the practitioner but designed for the degree-seeking student	2	67	0	0	1	25	4	13	38	97	13	33	58	42	13/14
University credit courses specifically designed for the continuing education student	1	33	1	4	0	0	2	6	21	54	7	18	32	23	20/21
Short intensive courses with or without credit, sponsored by University and/or library association	0	0	4	18	3	75	10	33	22	56	20	51	59	43	12
Institutes	3	100	7	31	4	100	12	40	23	59	29	74	78	57	6/7
Workshops	3	100	13	59	4	100	25	83	28	72	38	97	111	81	3
Non-credit, employer sponsored courses	3	100	18	82	2	50	1	3	3	8	9	23	36	26	17-19
Travelling programs	0	0	4	18	3	75	7	23	3	8	14	36	31	23	20/21
INTERACTION MODES															
Attending professional meetings and/or conferences	3	100	19	86	4	100	26	86	34	87	35	90	121	88	1/2
Participation in professional committees or task force groups	3	100	19	86	4	100	27	90	32	82	35	90	120	88	1/2
Invited conferences (groups of experts)	1	33	6	27	3	75	15	50	15	38	17	44	57	42	13/14
Internships	1	33	1	4	1	25	2	7	21	54	9	23	35	26	17-19
In-house lectures followed by discussion	0	0	4	18	2	50	7	23	31	79	16	41	60	44	11

TABLE 20 (continued)

MODES OF CONTINUING EDUCATION ORGANIZATIONS HAVE USED OR PROVIDED DURING THE PAST YEAR: COMPLETE SAMPLE, 1973 (Sheet 2 of 2)

(Questionnaire item number IV. Column 1) N=137

MODES	GROUP NAME												TOTAL		RANK
	Libraries --national		Library associations --national		Library associations --regional		Library associations --state		Library schools --accredited		State library agencies				
n =	3		22		4		30		30		30		137		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
INTERACTION MODES (continued)															
In-house all day staff meetings	0	0	2	9	0	0	8	27	15	38	18	46	43	31	16
Sabbatical leaves	0	0	0	0	0	0	1	3	18	46	0	0	19	14	24
Educational leaves	2	67	0	0	0	0	1	3	10	26	9	23	22	16	23
SELF-TEACHING MODES															
Oral or written informal reports by those who have attended conferences, seminars, etc.	2	67	14	64	3	75	18	60	28	72	18	46	83	61	4
Time for reading journals, report literature, books on-the-job	1	33	5	23	1	25	6	20	24	62	32	82	69	50	8/9
Provision of reading lists	1	33	11	50	2	50	13	43	17	44	20	51	64	47	10
Provision of information through a selective dissemination system	0	0	7	32	4	100	9	30	16	41	16	41	52	38	15
Participation in grass roots seminars or "invisible colleges"	0	0	4	18	3	75	5	17	14	36	10	26	36	26	17-19
Teaching others	2	67	8	36	3	75	8	27	26	67	22	56	69	50	8/9
Writing papers for publication	2	67	15	68	3	75	11	37	30	77	20	51	81	59	5
Research	1	33	3	14	3	75	20	67	31	79	20	51	78	57	6/7
Packaged courses	0	0	3	14	3	75	1	3	6	15	5	13	18	13	25
Provision of materials for home study	0	0	2	9	1	25	2	7	3	7	9	23	17	12	26
Correspondence courses	0	0	2	9	1	25	2	7	1	3	7	18	13	9	27
Use of continuing education center	1	33	3	14	2	50	0	0	7	18	10	26	23	17	22

TABLE 21

MODES OF CONTINUING EDUCATION ORGANIZATIONS HAVE USED OR PROVIDED DURING THE PAST YEAR: PARTIAL SAMPLE, 1973 (Sheet 1 of 2)

(Questionnaire item number IV. Column 1) N=49

MODES	GROUP NAME								TOTAL		RANK	GROUP NAME		
	Libraries --academic		Libraries --public		Libraries --school		Libraries --special					Library schools-- unaccredited		
n=	9		9		8		8		34			15		
	No.	%	No.	%	No.	%	No.	%	No.	%		No.	%	Rank
COURSE WORK MODES														
University credit courses open to the practitioner but designed for the degree-seeking student	8	89	5	56	2	25	6	75	21	62	7-9	12	80	2
University credit courses specifically designed for the continuing education student	4	44	4	44	5	62	6	75	19	56	11-13	8	53	11
Short intensive courses with or without credit, sponsored by University and/or library association	6	67	6	67	4	50	5	62	21	62	7-9	6	40	12-16
Institutes	5	56	7	78	4	50	7	88	23	68	6	1	7	24-26
Workshops	6	67	8	89	7	88	7	88	28	82	3	9	60	6-10
Non-credit, employer sponsored courses	4	44	4	44	3	38	5	62	16	47	15	0	0	27
Travelling programs	1	11	1	11	1	12	4	50	7	21	23	1	7	24-26
INTERACTION MODES														
Attending professional meetings and/or conferences	9	100	9	100	7	88	8	100	33	97	1	13	87	1
Participation in professional committees or task force groups	9	100	8	89	7	88	8	100	32	94	2	11	73	3
Invited conferences (groups of experts)	3	33	4	44	3	38	5	62	15	44	16/17	9	60	6-10
Internships	5	56	1	11	4	50	3	38	13	38	19	6	40	12-16
In-house lectures followed by discussion	6	67	9	100	4	50	5	62	24	71	5	6	40	12-16

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TABLE 21 (continued)

MODES OF CONTINUING EDUCATION ORGANIZATIONS HAVE USED OR PROVIDED DURING THE PAST YEAR: PARTIAL SAMPLE, 1973 (Sheet 2 of 2)

(Questionnaire item number IV. Column 1) N=49

MODES	GROUP NAME								TOTAL		RANK	GROUP NAME		
	Libraries --academic		Libraries --public		Libraries --school		Libraries --special					Library schools--unaccredited		
n=	9		9		8		8		34			15		
	No.	%	No.	%	No.	%	No.	%	No	%		No.	%	Rank
INTERACTION MODES (continued)														
In-house all day staff meetings	0	0	5	56	3	38	3	37	11	32	20/21	6	40	12-16
Sabbatical leaves	0	0	0	0	4	50	0	0	4	12	25/26	5	33	17
Educational leaves	4	44	4	44	5	62	4	50	17	50	14	6	40	12-16
SELF-TEACHING MODES														
Oral or written informal reports by those who have attended conferences, seminars, etc.	8	89	8	89	3	38	6	75	25	74	4	9	60	6-10
Time for reading journals, report literature, books on-the-job	8	89	8	89	2	25	3	38	21	62	7-9	9	60	6-10
Provision of reading lists	1	11	5	56	4	50	4	50	14	41	18	10	67	4/5
Provision of information through a selective dissemination system	7	11	5	56	3	50	4	50	19	56	11-13	4	27	19-21
Participation in grass roots seminars or "invisible colleges"	1	11	2	22	0	0	2	25	5	15	24	5	27	19-21
Teaching others	7	78	6	67	4	50	2	25	19	56	11-13	10	30	18
Writing papers for publication	6	67	5	56	4	50	5	62	20	59	10	10	67	4/5
Research	6	67	2	22	3	38	4	50	15	44	16-17	9	60	6-10
Packaged courses	1	11	0	0	0	0	3	37	4	12	25/26	2	13	23
Provision of materials for home study	2	22	3	33	2	25	2	25	9	26	22	3	20	22
Correspondence courses	0	0	1	11	11	12	1	12	3	9	27	1	7	24-26
Use of continuing education center	2	22	4	44	2	25	3	37	11	32	20/21	4	27	19-21

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TABLE 22

MODES OF CONTINUING EDUCATION ORGANIZATIONS FOUND MOST EFFECTIVE IN INCREASING THE COMPETENCY OF INDIVIDUALS: COMPLETE SAMPLE, 1973 (Sheet 1 of 2)

(Questionnaire item number IV. Column 2) N=137

MODES	GROUP NAME: Libraries --national		Library associations --national		Library associations --regional		Library associations --state		Library schools --accredited		State library agencies		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
COURSE WORK MODES														
University credit courses open to the practitioner but designed for the degree-seeking student	2	100	0	0	1	100	2	50	22	58	5	38	32	55
University credit courses specifically designed for the continuing education student	1	100	1	100	0	0	1	50	9	43	3	43	15	47
Short intensive courses with or without credit, sponsored by University and/or library association	0	0	1	20	2	67	6	60	12	55	15	75	36	61
Institutes	3	100	4	57	3	75	9	75	13	33	20	69	52	67
Workshops	3	100	10	77	3	75	18	72	18	64	30	78	82	74
Non-credit, employer sponsored courses	3	100	2	11	0	0	0	0	1	33	2	22	8	22
Travelling programs	0	0	1	25	1	33	3	43	1	33	5	36	11	35
INTERACTION MODES														
Attending professional meetings and/or conferences	1	33	11	58	1	25	16	62	15	44	24	69	68	57
Participation in professional committees or task force groups	2	67	9	47	2	50	17	63	7	32	15	43	52	43
Invited conferences (groups of experts)	0	0	2	33	1	33	12	80	4	27	4	24	23	40
Internships	1	100	1	100	0	0	0	0	6	29	3	33	11	31
In-house lectures followed by discussion	0	0	1	25	0	0	4	57	7	23	4	25	16	27

* The percentages in this Table were computed on the basis of the number of organizations that reported having used or provided the mode during the past year (Table 20).

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TABLE 22 (continued)

MODES OF CONTINUING EDUCATION ORGANIZATIONS FOUND MOST EFFECTIVE IN INCREASING THE COMPETENCY OF INDIVIDUALS: COMPLETE SAMPLE, 1973 (Sheet 2 of 2)

(Questionnaire item number IV, Column 2) N=137

MODES	GROUP NAME												TOTAL	
	Libraries --national		Library associations --national		Library associations --regional		Library associations --state		Library schools --accredited		State library agencies			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
INTERACTION MODES (continued)														
In-house all day staff meetings	0	0	0	0	0	0	3	38	4	27	7	39	14	33
Sabbatical leaves	0	0	0	0	0	0	0	0	5	28	0	0	5	26
Educational leaves	1	50	0	0	0	0	0	0	3	33	1	11	5	23
SELF-TEACHING MODES														
Oral or written informal reports by those who have attended conferences, seminars, etc.	1	50	5	36	0	0	3	17	5	13	6	33	20	24
Time for reading journals, report literature, books on-the-job	0	0	3	60	0	0	1	17	7	29	12	38	23	33
Provision of reading lists	0	0	2	18	0	0	3	23	1	6	0	0	6	9
Provision of information through a selective dissemination system	0	0	2	29	0	0	0	0	4	25	3	19	9	17
Participation in grass roots seminars or "invisible colleges"	0	0	1	25	0	0	1	20	2	14	4	40	8	22
Teaching others	0	0	3	38	0	0	2	25	6	23	4	18	15	22
Writing papers for publication	1	50	4	27	0	0	3	27	11	37	3	15	22	27
Research	1	100	2	67	0	0	2	10	8	26	2	10	15	19
Packaged courses	1	33	1	33	0	0	0	0	2	33	1	20	5	28
Provision of materials for home study	0	0	1	50	0	0	0	0	1	33	3	33	5	29
Correspondence courses	0	0	0	0	0	0	0	0	0	0	3	43	3	23
Use of continuing education center	0	0	0	0	0	0	0	0	2	29	2	20	4	17

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* The percentages in this Table were computed on the basis of the number of organizations that reported having used or provided the mode during the past year (Table 20).

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TABLE 23

MODES OF CONTINUING EDUCATION ORGANIZATIONS FOUND MOST EFFECTIVE IN INCREASING THE COMPETENCY IN INDIVIDUALS: PARTIAL SAMPLE, 1973 (Sheet 1 of 2)

(Questionnaire item number IV. Column 2) N=49

MODES	GROUP NAME								TOTAL		GROUP NAME	
	Libraries --academic		Libraries --public		Libraries --school		Libraries --special				Library schools--unaccredited	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
COURSE WORK MODES												
University credit courses open to the practitioner but designed for the degree-seeking student	4	50	4	80	2	100	3	50	13	62	11	92
University credit courses specifically designed for the continuing education student	0	0	3	75	4	80	3	50	10	53	6	75
Short intensive courses with or without credit, sponsored by University and/or library association	4	67	3	50	3	75	2	40	12	57	3	50
Institutes	5	100	2	29	0	0	3	43	10	43	1	100
Workshops	5	83	7	88	3	43	5	71	20	71	7	78
Non-credit, employer sponsored courses	1	25	2	50	1	33	1	20	5	31	0	0
Travelling programs	0	0	0	0	0	0	1	25	1	14	1	100
INTERACTION MODES												
Attending professional meetings and/or conferences	3	33	4	44	3	43	7	88	17	52	6	46
Participation in professional committees or task force groups	7	78	4	50	5	71	2	25	18	56	5	45
Invited conferences (groups of experts)	0	0	0	0	0	0	0	0	0	0	2	22
Internships	1	20	0	0	2	50	1	33	4	31	1	17
In-house lectures followed by discussion	4	67	5	56	0	0	1	20	10	42	1	17

* The percentages in this Table were computed on the basis of the number of organizations that reported having used or provided the mode during the past year (Table 21)

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TABLE 23 (continued)

MODES OF CONTINUING EDUCATION ORGANIZATIONS FOUND MOST EFFECTIVE IN INCREASING THE COMPETENCY IN INDIVIDUALS: PARTIAL SAMPLE, 1973 (Sheet 2 of 2)

(Questionnaire item number IV. Column 2) N=49

MODES	GROUP NAME								TOTAL		GROUP NAME	
	Libraries --academic		Libraries --public		Libraries --school		Libraries --special				Library schools-- unaccredited	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
INTERACTION MODES (continued)												
In-house all day staff meetings	0	0	3	60	1	33	0	0	2	18	2	33
Sabbatical leaves	0	0	0	0	1	25	0	0	1	25	3	60
Educational leaves	0	0	3	75	1	20	0	0	4	24	3	50
SELF-TEACHING MODES												
Oral or written informal reports by those who have attended conferences, seminars, etc.	4	50	2	25	1	33	1	17	8	32	4	44
Time for reading journals, report literature, books on-the-job	3	38	3	38	1	50	1	33	8	38	4	44
Provision of reading lists	0	0	1	20	0	0	0	0	1	7	4	40
Provision of information through a selective dissemination system	1	14	3	60	0	0	1	25	5	26	0	0
Participation in grass roots seminars or "invisible colleges"	1	100	0	0	0	0	0	0	1	20	2	40
Teaching others	3	43	3	50	1	25	0	0	7	39	2	20
Writing papers for publication	1	17	1	20	1	25	1	20	4	20	2	20
Research	1	17	1	50	1	33	0	0	3	20	3	33
Packaged courses	1	100	0	0	0	0	0	0	1	25	0	0
Provision of materials for home study	0	0	0	0	0	0	0	0	0	0	0	0
Correspondence courses	0	0	0	0	0	0	1	100	1	33	0	0
Use of continuing education center	1	50	1	25	0	0	1	33	3	27	2	50

* The percentages in this Table were computed on the basis of the number of organizations that reported having used or provided the mode during the past year (Table 21).

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TABLE 24

MODES OF CONTINUING EDUCATION ORGANIZATIONS DID NOT USE OR PROVIDE BUT WOULD HAVE LIKED TO HAVE USED OR PROVIDED: COMPLETE SAMPLE, 1973 (Sheet 1 of 2)

(Questionnaire item number IV. Column 3) N=137

MODES	GROUP NAME												TOTAL	
	Libraries --national		Library associations --national		Library associations --regional		Library associations --state		Library schools --accredited		State library agencies			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
COURSE WORK MODES														
University credit courses open to the practitioner but designed for the degree-seeking student	0	0	1	5	1	33	4	17	0	0	8	35	14	20
University credit courses specifically designed for the continuing education student	1	50	5	26	2	50	10	40	11	61	13	45	42	46
Short intensive courses with or without credit, sponsored by University and/or library association	1	33	16	100	1	100	11	58	7	54	16	89	53	76
Institutes	0	0	8	62	0	0	9	64	8	53	6	86	31	63
Workshops	0	0	5	38	0	0	4	64	4	27	0	0	13	27
Non-credit, employer sponsored courses	0	0	0	0	1	50	2	9	7	25	2	9	12	12
Travelling programs	0	0	6	43	0	0	6	33	11	39	4	19	27	32
INTERACTION MODES														
Attending professional meetings and/or conferences	0	0	0	0	0	0	2	50	0	0	1	50	3	38
Participation in professional committees or task force groups	0	0	0	0	0	0	2	67	0	0	1	50	3	33
Invited conferences (groups of experts)	0	0	4	33	0	0	8	67	8	58	7	44	27	48
Internships	0	0	4	27	2	67	5	21	3	33	7	32	21	28
In-house lectures followed by discussion	0	0	3	23	1	50	5	25	0	0	6	33	15	25

* The percentages in this Table were computed on the basis of the number of organizations that did not use or provide the mode. (This number was obtained by subtracting the number of organizations that had used or provided the particular mode (Table 20) from the number of respondents in each group.)

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TABLE 24 (continued)

MODES OF CONTINUING EDUCATION ORGANIZATIONS DID NOT USE OR PROVIDE BUT WOULD HAVE LIKED TO HAVE USED OR PROVIDED: COMPLETE SAMPLE, 1973 (Sheet 2 of 2)

(Questionnaire item number IV. Column 3) N=137

MODES	GROUP NAME												TOTAL	
	Libraries --national		Library associations --national		Library associations --regional		Library associations --state		Library schools --accredited		State library agencies			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
INTERACTION MODES (continued)														
In-house all day staff meetings	0	0	2	13	1	25	4	22	7	50	2	12	16	23
Sabbatical leaves	0	0	4	22	1	25	0	0	8	57	11	31	24	25
Educational leaves	1	100	4	22	1	33	1	5	7	37	15	52	29	33
SELF-TEACHING MODES														
Oral or written informal reports by those who have attended conferences, seminars, etc.	1	100	1	17	0	0	2	29	0	0	0	0	9	35
Time for reading journals, report literature, books on-the-job	1	50	0	0	0	0	1	9	1	17	2	29	5	12
Provision of reading lists	1	50	1	14	0	0	3	27	1	8	3	19	9	18
Provision of information through a selective dissemination system	1	33	5	42	0	0	9	60	4	33	7	38	26	43
Participation in grass roots seminars or "invisible colleges"	0	0	3	21	0	0	7	39	4	29	2	8	16	22
Teaching others	1	100	2	20	0	0	0	0	0	0	0	0	3	8
Writing papers for publication	1	100	0	0	0	0	1	8	0	0	2	14	4	11
Research	0	0	2	22	0	0	3	19	0	0	1	7	6	14
Packaged courses	0	0	5	33	0	0	4	19	9	38	7	24	25	27
Provision of materials for home study	0	0	3	19	1	33	6	30	3	12	3	11	16	17
Correspondence courses	0	0	2	12	1	5	3	11	5	19	5	19	16	16
Use of continuing education center	0	0	0	0	1	50	5	23	6	30	6	23	20	22

* The percentages in this Table were computed on the basis of the number of organizations that did not use or provide the mode. (This number was obtained by subtracting the number of organizations that had used or provided the particular mode (Table 21) from the number of respondents in each group.)

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TABLE 25

MODES OF CONTINUING EDUCATION ORGANIZATIONS DID NOT USE OR PROVIDE BUT WOULD HAVE LIKED TO HAVE USED OR PROVIDED: PARTIAL SAMPLE, 1973 (Sheet 1 of 2)

(Questionnaire item number IV. Column 3) N=49

MODES	GROUP NAME								TOTAL		GROUP NAME	
	Libraries --academic		Libraries --public		Libraries --school		Libraries --special				Library schools-- unaccredited	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
COURSE WORK MODES												
University credit courses open to the practitioner but designed for the degree-seeking student	1	100	2	67	0	0	1	50	4	36	0	0
University credit courses specifically designed for the continuing education student	2	40	2	67	0	0	1	50	5	42	3	50
Short intensive courses with or without credit, sponsored by University and/or library association	2	67	2	67	1	50	3	100	8	73	4	67
Institutes	3	75	1	100	1	50	0	0	5	71	6	60
Workshops	3	100	1	100	0	0	2	100	6	100	2	100
Non-credit, employer sponsored courses	2	40	3	75	0	0	0	0	5	33	4	33
Travelling programs	2	33	1	17	2	40	1	33	6	31	3	30
INTERACTION MODES												
Attending professional meetings and/or conferences	0	0	0	0	0	0	0	0	0	0	0	0
Participation in professional committees or task force groups	0	0	0	0	0	0	0	0	0	0	2	67
Invited conferences (groups of experts)	5	100	1	25	1	25	1	33	8	50	4	100
Internships	2	50	4	57	0	0	1	20	7	35	2	28
In-house lectures followed by discussion	0	0	0	0	0	0	0	0	0	0	2	33

* The percentages in this Table were computed on the basis of the number of organizations that did not use or provide the mode. (This number was obtained by subtracting the number of organizations that had used or provided the particular mode (Table 21) from the number of respondents in each group.)

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TABLE 25 (continued)

MODES OF CONTINUING EDUCATION ORGANIZATIONS DID NOT USE OR PROVIDE BUT WOULD HAVE LIKED TO HAVE USED OR PROVIDED: PARTIAL SAMPLE, 1973 (Sheet 2 of 2)

(Questionnaire item number IV. Column 3) N=49

MODES	GROUP NAME								TOTAL		GROUP NAME	
	Libraries --academic		Libraries --public		Libraries --school		Libraries --special				Library schools --unaccredited	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
INTERACTION MODES (continued)												
In-house all day staff meetings	3	38	3	100	2	50	2	50	10	53	3	38
Sabbatical leaves	4	50	5	63	1	33	0	0	10	35	5	56
Educational leaves	2	50	3	75	1	20	1	25	7	42	6	75
SELF-TEACHING MODES												
Oral or written informal reports by those who have attended conferences, seminars, etc.	0	0	0	0	0	0	1	50	1	14	1	20
Time for reading journals, report literature, books on-the-job	0	0	0	0	1	20	2	50	3	27	2	50
Provision of reading lists	1	12	1	33	0	0	3	75	5	29	1	25
Provision of information through a selective dissemination system	2	100	1	33	1	33	1	33	5	45	3	30
Participation in grass roots seminars or "invisible colleges"	1	12	2	33	0	0	1	20	4	15	2	20
Teaching others	0	0	0	0	0	0	1	20	1	9	1	25
Writing papers for publication	0	0	0	0	0	0	1	50	1	9	2	40
Research	1	11	1	11	0	0	1	12	3	9	1	7
Packaged courses	1	14	3	38	1	17	0	0	5	20	3	30
Provision of materials for home study	0	0	1	20	0	0	1	20	2	9	1	9
Correspondence courses	0	0	1	14	1	20	1	17	3	11	0	0
Use of continuing education center	1	50	3	75	0	0	1	33	5	45	1	25

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* The percentages in this Table were computed on the basis of the number of organizations that did not use or provide the mode. (This number was obtained by subtracting the number of of organizations that had used or provided the particular mode (Table 21) from the number of respondents in each group.)

TABLES 26 - 31

Tables 26 - 31 refer to questionnaire item number V: Methods of Continuing Education.

Table 26 identifies the methods most often used or provided by the complete sample of respondents. "Discussion" and "lecture" ranked as the two most often used or provided methods, and "talk-back cable TV" and "dial access" were used least often. The findings of the partial sample (Table 27) of libraries reflected the same trends; that is, traditional methods such as lectures, discussions, and films were used or provided most often, while innovative methods such as dial access and cable TV were least often provided. Table 29 indicates that the unaccredited library schools do not follow the trend of the associations and libraries. The unaccredited library schools most often used or provided "16 mm films," "slides," and "discussions" as methods of continuing education. However, talk-back cable TV still ranked last. It is apparent that no group sampled used cable TV to any large extent.

Table 29 indicates the perceived effectiveness of the methods used.

The effectiveness of the five most often used or provided methods (as indicated by the complete sample of associations, national libraries, accredited library schools, and state agencies) is listed as follows:

	Method	Percentage of Respondents Who Used the Method	Percentage of Respondents Who Used the Method Who Found it to be Among the 5 Most Effective Methods
Complete Sample			
1.	Lecture	88	46
2.	Discussion	78	60
3.	Slides	70	29
4.	Cassettes	68	23
5.	16 mm films	67	37

It should be noted that of the five respondents in the complete sample using "individually prescribed instruction," more than half found it to be effective.

Tables 27 and 29 indicate the effectiveness of the most often used methods as perceived by respondents from the partial sample.

	Methods	Percentage of Respondents Who Used the Method	Percentage of Respondents Who Used the Method Who Found it to be Among the 5 Most Effective Methods
Libraries			
1.	Discussion	82	68
2.	Lecture	68	22
3.	16 mm film	62	38
4.	Slides	62	19
5.	Cassettes	41	21
6.	Class meetings	41	29
7.	Field trips	41	36
Unaccredited Library Schools			
1.	16 mm film	93	31
2.	Slides	93	31
3.	Discussion	93	38
4.	Cassettes	86	42
5.	Lecture	86	25

It is interesting to note that the unaccredited library schools do not seem especially satisfied with the five methods they chose to use most often.

Of the methods not used by the respondents of the complete sample, "video-tapes" were reported to be the most "liked to have (been) used or provided" (Table 30). "Cable TV" was the second most "liked to have (been) used or provided." Table 28 indicates that those respondents who did use or provide video-tapes and/or cable TV were split as to whether or not the methods were effective. Thirty-eight percent of those using video-tapes felt it was an effective means; twenty-nine percent, or 2 out of 7, found cable TV to be one of the five most effective methods.

TABLE 26

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METHODS OF CONTINUING EDUCATION ORGANIZATIONS HAVE USED OR PROVIDED DURING THE PAST YEAR: COMPLETE SAMPLE, 1973 (Sheet 1 of 2)

(Questionnaire item number V. Column 1) N=130

METHODS	GROUP NAME: Libraries--national		Library associations--national		Library associations--regional		Library associations--state		Library schools--accredited		State library agencies		TOTAL		RANK
n=	3		18		4		28		38		39		130		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Rank
USE OF AUDIO VISUAL MATERIALS AND EQUIPMENT															
8 mm film loops	0	0	3	17	1	25	7	25	24	63	11	28	46	35	11
16 mm films	1	33	8	44	3	75	13	46	33	87	29	74	87	67	5
Slides	1	33	12	67	4	100	17	61	31	82	26	67	91	70	3
Cassettes	2	67	11	61	3	75	11	39	34	89	27	69	88	68	4
Video tapes	0	0	3	16	2	50	7	25	27	71	13	33	52	40	8/9
Classroom TV	1	33	0	0	0	0	0	0	11	29	1	3	13	10	18/19
Closed Circuit TV	0	0	1	6	0	0	1	4	5	13	1	3	8	6	23
Talk-back cable TV coupled with programmed self-learning texts	0	0	0	0	0	0	0	0	3	8	0	0	3	2	27
Cable TV	0	0	0	0	0	0	2	7	3	8	2	5	4	3	25/26
Dial access learning centers	0	0	0	0	0	0	0	0	4	11	0	0	4	3	25/26
PROGRAMMED INSTRUCTION															
Individual prescribed instruction (IPI)	0	0	0	0	0	0	0	0	9	24	0	0	9	7	22
Computer-assisted instruction (CAI)	0	0	0	0	0	0	0	0	12	32	0	0	12	9	20/21
Programmed self-learning texts	1	33	0	0	1	25	0	0	10	26	6	15	18	14	16

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TABLE 26 (continued)

METHODS OF CONTINUING EDUCATION ORGANIZATIONS HAVE USED OR PROVIDED DURING THE PAST YEAR: COMPLETE SAMPLE, 1973 (Sheet 2 of 2)

(Questionnaire item number V. Column 1) N=130

METHODS	GROUP NAME												TOTAL		RANK
	Libraries--national		Library associations--national		Library associations--regional		Library associations--state		Library schools--accredited		State library agencies				
n=	3		18		4		28		38		39		130		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Rank
SIMULATION															
The case method	1	33	3	17	3	75	5	18	27	71	13	33	52	4	24
Incident-Method (Incident-Process technique)	0	0	1	6	1	25	0	0	9	24	2	5	13	10	18/19
Management games	1	33	1	6	3	75	5	18	18	47	12	31	40	31	12/13
Simulation exercises	0	0	1	6	2	50	2	7	21	55	8	46	48	37	10
Role playing	1	33	3	14	3	75	12	43	24	71	18	46	64	49	6
In-basket exercises	0	0	1	6	1	25	0	0	13	34	1	3	16	12	17
Laboratory education	0	0	1	6	1	25	1	4	19	50	4	10	26	20	15
OTHER METHODS															
The lecture	3	100	15	83	4	100	18	64	34	89	28	72	102	78	2
Discussion	2	67	16	89	4	100	22	79	36	95	34	87	114	88	1
Classroom meetings	1	33	3	17	1	25	2	7	35	92	10	26	52	40	8/9
Practicum	0	0	2	11	0	0	5	18	23	61	10	26	40	31	12/13
Field study trips	0	0	4	22	2	50	6	21	29	76	15	38	56	43	7
Sensitivity training	0	0	1	6	0	0	0	0	6	16	5	13	12	9	20/21
Systematic observation	0	0	1	6	2	50	3	11	16	42	9	23	31	24	14
METHODS NOT LISTED ABOVE															
Other	0	0	1	6	2	50	0	0	1	3	2	5	6	5	

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TABLE 27

METHODS OF CONTINUING EDUCATION ORGANIZATIONS HAVE USED OR PROVIDED DURING THE PAST YEAR: PARTIAL SAMPLE, 1973 (Sheet 1 of 2)

(Questionnaire item number V. Column 1) N=48

	GROUP NAME											GROUP NAME		
METHODS	Libraries--academic		Libraries--public		Libraries--school		Libraries--special		TOTAL		RANK	Library schools--unaccredited		
n=	9		9		8		8		34			14		
	No.	%	No.	%	No.	%	No.	%	No.	%	Rank	No.	%	Rank
USE OF AUDIO VISUAL MATERIALS AND EQUIPMENT														
8 mm film loops	1	11	1	11	4	50	2	25	8	24	13-15	7	50	13-15
16 mm films	2	22	7	78	8	100	4	50	21	62	3/4	13	93	1-3
Slides	2	22	5	56	8	100	6	75	21	62	3/4	13	93	1-3
Cassettes	1	11	2	22	7	88	4	50	14	41	5-7	12	86	4/5
Video tapes	1	11	2	22	4	50	4	50	11	32	9	10	71	8-11
Classroom TV	0	0	2	22	4	50	1	12	4	21	16/17	2	21	20-23
Closed Circuit TV	0	0	1	11	1	12	3	38	5	15	20-22	3	21	20-23
Talk-back cable TV coupled with programmed self-learning texts	0	0	2	22	0	0	1	12	3	9	23/24	0	0	27
Cable TV	0	0	0	0	0	0	0	0	0	0	27/28	2	14	24-26
Dial access learning centers	0	0	0	0	0	0	0	0	0	0	27/28	2	14	24-26
PROGRAMMED INSTRUCTION														
Individual prescribed instruction (IPI)	2	22	0	0	3	38	1	12	6	18	18/19	3	21	20-23
Computer-assisted instruction (CAI)	1	11	0	0	0	0	0	0	1	3	26	5	36	18
Programmed self-learning texts	2	22	0	0	2	25	2	25	6	18	18/19	3	21	20-23

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TABLE 27 (continued)

METHODS OF CONTINUING EDUCATION ORGANIZATIONS HAVE USED OR PROVIDED DURING THE PAST YEAR: PARTIAL SAMPLE, 1973 (Sheet 2 of 2)

(Questionnaire item number V. Column 1) N=48

METHODS	GROUP NAME								TOTAL		RANK	GROUP NAME		
	Libraries--academic		Libraries--public		Libraries--school		Libraries--special					Library schools--unaccredited		
n=	9		9		8		8		34			14		
	No.	%	No.	%	No.	%	No.	%	No.	%	Rank	No.	%	Rank
SIMULATION														
The case method	2	22	3	33	1	12	3	38	9	26	12	7	50	13-15
Incident-Method (Incident-Process technique)	0	0	1	11	3	38	1	12	5	15	20-22	6	43	16/17
Management games	1	11	2	22	2	25	3	38	8	24	13-15	6	43	16/17
Simulation exercises	0	0	0	0	2	25	3	38	5	15	20-22	8	57	12
Role playing	1	11	4	44	5	63	2	25	12	35	8	10	71	8-11
In-basket exercises	0	0	1	11	1	12	1	12	3	9	23/24	4	29	19
Laboratory education	3	33	0	0	2	25	2	25	7	21	16/17	11	79	6/7
OTHER METHODS														
The lecture	5	56	7	78	6	75	5	63	23	68	2	12	86	4/5
Discussion	9	100	8	89	7	86	4	50	28	82	1	13	93	1-3
Classroom meetings	3	33	3	33	3	38	5	63	14	41	5-7	10	71	8-11
Practicum	3	33	3	33	2	25	2	25	10	29	10/11	11	79	6/7
Field study trips	7	78	4	44	1	13	2	25	14	41	5-7	10	71	8-11
Sensitivity training	0	0	1	11	5	63	2	25	8	24	13-15	2	14	24-26
Systematic observation	1	11	5	56	3	38	1	12	10	29	10/11	7	50	13-15
METHODS NOT LISTED ABOVE														
Other	0	0	1	11	1	12	0	0	2	6	25	1	7	

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TABLE 28

METHODS OF CONTINUING EDUCATION ORGANIZATIONS FOUND MOST EFFECTIVE IN INCREASING THE COMPETENCY IN INDIVIDUALS: COMPLETE SAMPLE, 1973 (Sheet 1 of 2)

(Questionnaire item number V. Column 2) N=130

METHODS	GROUP NAME: Libraries--national		Library associations--national		Library associations--regional		Library associations--state		Library schools--accredited		State library agencies		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
USE OF AUDIO VISUAL MATERIALS AND EQUIPMENT														
8 mm film loops	0	0	0	0	0	0	1	14	2	8	1	9	4	9
16 mm films	1	100	1	12	1	33	6	46	8	26	15	52	32	37
Slides	1	100	1	8	1	25	6	35	8	26	9	35	26	29
Cassettes	1	50	1	9	1	33	2	18	9	26	7	26	21	23
Video tapes	0	0	0	0	1	50	6	86	8	30	4	31	20	38
Classroom TV	1	100	0	0	0	0	0	0	0	0	0	0	1	8
Closed Circuit TV	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Talk-back cable TV coupled with programmed self-learning texts	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cable TV	0	0	0	0	0	0	1	50	0	0	1	50	2	29
Dial access learning centers	0	0	0	0	0	0	0	0	1	25	0	0	1	25
PROGRAMMED INSTRUCTION														
Individual prescribed instruction (IPI)	0	0	0	0	0	0	0	0	5	56	0	0	5	56
Computer-assisted instruction (CAI)	0	0	0	0	0	0	0	0	4	33	0	0	4	33
Programmed self-learning texts	1	100	0	0	0	0	0	0	4	40	1	3	6	33

* The percentages in this Table were computed on the basis of the number of organizations that reported having used or provided the method during the past year (Table 26).

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TABLE 28 (continued)

METHODS OF CONTINUING EDUCATION ORGANIZATIONS FOUND MOST EFFECTIVE IN INCREASING THE COMPETENCY IN INDIVIDUALS: COMPLETE SAMPLE, 1973 (Sheet 2 of 2)

(Questionnaire item number V. Column 2) N=130

METHODS	GROUP NAME												TOTAL	
	Libraries--national		Library associations--national		Library associations--regional		Library associations--state		Library schools--accredited		State library agencies			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
SIMULATION														
The case method	0	0	2	67	2	67	1	20	8	30	6	46	19	37
Incident-Method (Incident-Process technique)	0	0	0	0	0	0	0	0	1	11	0	0	1	8
Management games	1	100	0	0	2	67	4	80	3	17	6	50	16	40
Simulation exercises	0	0	0	0	0	0	0	0	4	19	4	50	8	17
Role playing	1	100	2	67	2	67	7	58	6	22	5	28	23	36
In-basket exercises	0	0	1	100	0	0	0	0	0	0	0	0	1	6
Laboratory education	0	0	1	100	0	0	0	0	6	32	2	50	9	35
OTHER METHODS														
The lecture	2	67	7	47	2	50	8	44	14	41	14	50	47	46
Discussion	2	100	10	62	2	50	15	68	16	42	23	68	68	60
Classroom meetings	0	0	2	67	0	0	1	50	9	26	5	50	14	33
Practicum	0	0	0	0	0	0	1	20	7	30	4	40	12	30
Field study trips	0	0	2	50	1	50	4	67	6	21	7	47	20	36
Sensitivity training	0	0	0	0	0	0	0	0	0	0	2	40	2	17
Systematic observation	0	0	1	100	0	0	1	33	1	6	4	44	7	23
METHODS NOT LISTED ABOVE														
Other	0	0	1	100	2	100	0	0	1	100	2	100	6	100

* The percentages in this Table were computed on the basis of the number of organizations that reported having used or provided the method during the past year (Table 26).

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TABLE 29

METHODS OF CONTINUING EDUCATION ORGANIZATIONS FOUND MOST EFFECTIVE IN INCREASING THE COMPETENCY IN INDIVIDUALS: PARTIAL SAMPLE, 1973 (Sheet 1 of 2)

(Questionnaire item number V. Column 2) N=48

METHODS	GROUP NAME								TOTAL		GROUP NAME	
	Libraries--academic		Libraries--public		Libraries--school		Libraries--special				Library schools--unaccredited	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
USE OF AUDIO VISUAL MATERIALS AND EQUIPMENT												
8 mm film loops	0	0	0	0	0	0	0	0	0	0	2	29
16 mm films	1	50	3	43	2	25	2	50	8	38	4	31
Slides	1	50	2	40	1	12	0	0	4	19	4	31
Cassettes	1	100	0	0	1	14	1	25	3	21	5	42
Video tapes	1	100	1	50	0	0	1	25	3	27	4	40
Classroom TV	0	0	1	50	0	0	0	0	1	14	0	0
Closed Circuit TV	0	0	0	0	0	0	1	33	1	20	0	0
Talk-back cable TV coupled with programmed self-learning texts	0	0	0	0	0	0	1	100	1	33	0	0
Cable TV	0	0	0	0	0	0	0	0	0	0	0	0
Dial access learning centers	0	0	0	0	0	0	0	0	0	0	0	0
PROGRAMMED INSTRUCTION												
Individual prescribed instruction (IPI)	1	50	0	0	0	0	1	100	2	33	1	33
Computer-assisted instruction (CAI)	1	100	0	0	0	0	0	0	1	100	1	20
Programmed self-learning texts	1	50	0	0	0	0	1	50	2	33	1	33

* The percentages in this Table were computed on the basis of the number of organizations that reported having used or provided the method during the past year (Table 27).

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TABLE 29 (continued)

METHODS OF CONTINUING EDUCATION ORGANIZATIONS FOUND MOST EFFECTIVE IN INCREASING THE COMPETENCY IN INDIVIDUALS: PARTIAL SAMPLE, 1973 (Sheet 2 of 2)

(Questionnaire item number V. Column 2) N=48

METHODS	GROUP NAME								TOTAL		GROUP NAME	
	Libraries--academic		Libraries--public		Libraries--school		Libraries--special				Library schools--unaccredited	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
SIMULATION												
The case method	1	50	2	67	1	100	0	0	4	44	4	57
Incident-Method (Incident-Process technique)	0	0	0	0	2	67	0	0	2	40	1	17
Management games	0	0	1	50	0	0	0	0	1	12	2	33
Simulation exercises	0	0	0	0	1	50	1	33	2	40	3	38
Role playing	0	0	4	100	1	20	1	50	6	50	1	70
In-basket exercises	0	0	1	100	0	0	0	0	1	33	0	0
Laboratory education	3	100	0	0	2	100	0	0	5	71	4	36
OTHER METHODS												
The lecture	2	40	3	43	0	0	0	0	5	22	3	25
Discussion	4	44	7	88	3	43	1	25	19	68	5	38
Classroom meetings	1	33	0	0	0	0	1	20	2	29	2	20
Practicum	2	67	3	100	2	100	0	0	7	70	4	36
Field study trips	2	29	2	50	1	100	0	0	5	36	4	40
Sensitivity training	0	0	1	100	0	0	0	0	1	12	0	0
Systematic observation	1	100	2	40	1	33	0	0	4	40	2	29
METHODS NOT LISTED ABOVE												
Other	0	0	0	0	0	0	0	0	0	0	0	0

* The percentages in this Table were computed on the basis of the number of organizations that reported having used or provided the method during the past year (Table 27).

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TABLE 30

METHODS OF CONTINUING EDUCATION ORGANIZATIONS DID NOT USE OR PROVIDE BUT WOULD HAVE LIKED TO HAVE USED OR PROVIDED: COMPLETE SAMPLE, 1973 (Sheet 1 of 2)

(Questionnaire item number V. Column 3) N=130

METHODS	GROUP NAME												TOTAL	
	Libraries--national		Library associations--national		Library associations--regional		Library associations--state		Library schools--accredited		State library agencies			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
USE OF AUDIO VISUAL MATERIALS AND EQUIPMENT														
8 mm film loops	1	33	0	0	0	0	4	22	2	18	8	33	15	21
16 mm films	1	50	1	10	0	0	1	7	1	25	5	62	9	22
Slides	2	100	0	0	0	0	3	27	1	20	2	18	8	22
Cassettes	0	0	1	17	0	0	5	33	0	0	4	40	10	28
Video tapes	1	33	5	38	2	100	8	42	4	50	14	64	34	47
Classroom TV	0	0	1	6	0	0	1	4	9	53	2	5	17	17
Closed Circuit TV	0	0	1	6	2	50	5	21	13	59	7	21	28	27
Talk-back cable TV coupled with programmed self-learning texts	0	0	1	6	1	33	3	12	12	50	10	30	27	26
Cable TV	0	0	0	0	1	25	8	35	14	52	13	42	36	34
Dial access learning centers	0	0	0	0	1	25	3	12	12	44	2	6	18	16
PROGRAMMED INSTRUCTION														
Individual prescribed instruction (IPI)	0	0	2	12	1	33	5	20	6	27	5	15	19	18
Computer-assisted instruction (CAI)	0	0	1	6	2	50	4	16	10	50	4	11	21	20
Programmed self-learning texts	0	0	3	19	1	33	3	12	4	20	9	32	20	21

* The percentages in this Table were computed on the basis of the number of organizations that did not use or provide the method. (This number was obtained by subtracting the number of organizations that had used or provided the particular method (Table 26) from the number of respondents in each group.)

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TABLE 30 (continued)

METHODS OF CONTINUING EDUCATION ORGANIZATIONS DID NOT USE OR PROVIDE BUT WOULD HAVE LIKED TO HAVE USED OR PROVIDED: COMPLETE SAMPLE, 1973 (Sheet 2 of 2)

(Questionnaire item number V. Column 3) N=130

METHODS	GROUP NAME												TOTAL	
	Libraries--national		Library associations--national		Library associations--regional		Library associations--state		Library schools--accredited		State library agencies			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
SIMULATION														
The case method	0	0	1	8	1	100	4	24	2	33	8	36	16	28
Incident-Method (Incident-Process technique)	1	33	1	7	2	67	2	9	3	14	1	3	10	10
Management games	0	0	2	13	0	0	6	32	5	38	6	26	19	26
Simulation exercises	1	33	3	19	1	50	8	38	5	42	4	15	22	28
Role playing	1	50	1	8	0	0	3	21	2	29	7	41	14	26
In-basket exercises	0	0	2	13	2	67	3	13	3	16	2	6	12	13
Laboratory education	1	33	0	0	2	67	2	9	1	8	5	17	11	13
OTHER METHODS														
The lecture	0	0	0	0	0	0	1	17	0	0	2	20	3	15
Discussion	1	10	0	0	0	0	1	25	0	0	0	0	2	18
Classroom meetings	1	50	0	0	1	33	3	15	0	0	1	4	6	10
Practicum	1	33	1	7	2	50	0	0	1	6	3	13	8	10
Field study trips	2	67	1	8	0	0	5	31	2	33	8	42	18	31
Sensitivity training	0	0	1	6	2	50	2	9	1	4	4	15	10	10
Systematic observation	0	0	1	7	1	50	3	16	3	18	4	17	12	15
METHODS NOT LISTED ABOVE														
Other	0	0	1	100	0	0	1	33	0	0	0	0	2	50

* The percentages in this Table were computed on the basis of the number of organizations that did not use or provide the method. (This number was obtained by subtracting the number of organizations that had used or provided the particular method (Table 26) from the number of respondents in each group.)

TABLE 31

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METHODS OF CONTINUING EDUCATION ORGANIZATIONS DID NOT USE OR PROVIDE BUT WOULD HAVE LIKED TO HAVE USED OR PROVIDED: PARTIAL SAMPLE, 1973 (Sheet 1 of 2)

(Questionnaire item number V. Column 3) N=48

METHODS	GROUP NAME								TOTAL		GROUP NAME	
	Libraries--academic		Libraries--public		Libraries--school		Libraries--special				Library schools--unaccredited	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
USE OF AUDIO VISUAL MATERIALS AND EQUIPMENT												
8 mm film loops	0	0	1	17	1	33	0	0	2	11	2	30
16 mm films	0	0	1	100	0	0	0	0	1	11	1	100
Slides	0	17	2	67	0	0	0	0	3	27	1	100
Cassettes	2	29	3	50	0	0	1	50	6	39	1	100
Video tapes	2	29	5	100	2	67	1	50	11	65	3	75
Classroom TV	0	0	2	33	1	33	1	33	4	20	1	10
Closed Circuit TV	0	0	4	44	1	12	1	12	6	18	3	21
Talk-back cable TV coupled with programmed self-learning texts	1	12	4	67	0	0	1	25	6	26	1	8
Cable TV	1	12	4	50	0	0	1	20	6	23	1	10
Dial access learning centers	1	12	3	43	1	17	2	40	7	28	3	27
PROGRAMMED INSTRUCTION												
Individual prescribed instruction (IPI)	1	17	4	57	0	0	0	0	5	25	2	22
Computer-assisted instruction (CAI)	2	29	2	29	1	20	2	40	7	29	2	14
Programmed self-learning texts	1	17	3	43	0	0	1	25	5	25	1	10

* The percentages in this Table were computed on the basis of the number of organizations that did not use of provide the method. (This number was obtained by subtracting the number of organizations who had used or provided the particular method (Table 27) from the number of respondents in each group.)

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TABLE 31 (continued)

METHODS OF CONTINUING EDUCATION ORGANIZATIONS DID NOT USE OR PROVIDE BUT WOULD HAVE LIKED TO HAVE USED OR PROVIDED: PARTIAL SAMPLE, 1973 (Sheet 2 of 2)

(Questionnaire item number V. Column 3) N=48

METHODS	GROUP NAME								TOTAL		GROUP NAME	
	Libraries--academic		Libraries--public		Libraries--school		Libraries--special				Library schools--unaccredited	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
SIMULATION												
The case method	2	50	3	60	0	0	1	25	6	38	1	33
Incident-Method (Incident-Process technique)	2	25	2	40	0	0	0	0	4	18	2	33
Management games	3	43	3	50	2	50	0	0	8	38	3	50
Simulation exercises	1	12	1	17	0	0	1	25	3	14	2	40
Role playing	1	14	2	50	0	0	0	0	3	18	3	21
In-basket exercises	1	11	0	0	0	0	0	0	1	3	2	50
Laboratory education	1	20	1	14	0	0	0	0	2	10	0	0
OTHER METHODS												
The lecture	0	0	1	100	0	0	2	67	3	50	0	0
Discussion	0	0	0	0	0	0	1	33	1	33	1	100
Classroom meetings	1	25	2	40	0	0	0	33	6	42	0	0
Practicum	0	0	3	75	0	0	1	17	4	22	1	50
Field study trips	1	100	4	100	1	33	0	0	6	46	3	75
Sensitivity training	1	14	2	33	1	50	1	50	5	25	2	20
Systematic observation	3	50	0	0	1	50	0	0	4	25	0	0
METHODS NOT LISTED ABOVE												
Other	0	0	0	0	0	0	0	0	0	0	0	0

* The percentages in this Table were computed on the basis of the number of organizations that did not use or provide the method. (This number was obtained by subtracting the number of organizations that had used or provided the particular method (Table 27) from the number of respondents in each group.)

TABLES 32 and 33

Table 32 indicates the types of rewards, recognition and incentives currently being provided for participation in continuing education. Table 33 indicates those rewards, recognition, and incentives which respondents think should be provided.

These Tables make four points.

First, the Tables show that four types of rewards, recognition, and incentives -- creating a stimulating job, promotion, pay raises, and keeping a record of continuing education activity -- are universal, and are ranked at the top of the list in most cases.

Second, the Tables indicate that the ranking pattern for these rewards, recognition, and incentives is very similar for all target groups.

Third, the overall conclusion seems to be that there should be a general expansion and increase in the rewards, recognition, and incentives provided for continuing education activity. For each item, more respondents suggested the use of rewards than indicated that rewards were currently being provided. Thus, while only 22 percent of the respondents indicated that promotion, pay raises, and record of continuing education activity were actually used as rewards, for the same items in Table 33 the percentages lie between 52 and 56 percent.

Fourth, in only one instance did the ranking order of an item vary considerably from Table 32 ("currently provided" status) to Table 33 ("should be" status) -- and that item was "giving nationally recognized continuing education units," which ranked high in the "should be" Table, and low in the "currently provided" Table.

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TABLE 32

TYPES OF CONTINUING EDUCATION REWARDS, RECOGNITION, OR INCENTIVES THAT ARE PROVIDED FOR TARGET GROUPS, AS INDICATED BY PERCENTAGE OF RESPONDENT ORGANIZATIONS, 1973

(Questionnaire item number VI.A. Column 1) N=112

REWARDS RECOGNITION INCENTIVES	TARGET GROUPS												
	All		Professionals		Para-professionals		Library technicians		Clericals		Trustees		Other(s)
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%
Pay raises	22	2-4	47	3	31	3/4	30	2-4	33	3	22	3-5	2
Promotion	22	2-4	48	2	33	2	30	2-4	34	2	22	3-5	0
Status symbols	17	5/6	36	5	23	6	19	7	21	7	28	2	1
Creating a stimulating job	34	1	49	1	40	1	40	1	41	1	34	1	2
Job security	17	5/6	33	6	22	7	23	6	24	5	17	6/7	1
Fringe benefits	12	9	21	9	18	9	17	8/9	19	8	12	9	1
Freedom and autonomy	13	8	27	8	20	8	17	8/9	18	9	13	8	2
Giving certificate	16	7	30	7	27	5	26	5	22	6	17	6/7	0
Giving nationally recognized continuing education units*	3	10	4	10/11	4	10	4	10	4	10	3	10	0
Record of continuing education activity kept for each individual	22	2-4	38	4	31	3/4	30	2-4	30	4	22	3-5	0
Other	1	11	4	10/11	3	11	3	11	2	11	1	11	0

* The Continuing Education Unit (CEU) has been defined by a group of associations interested in the feasibility of a uniform unit of measurement for non-credit continuing education as follows: Ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction.

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TABLE 33

TYPES OF CONTINUING EDUCATION REWARDS, RECOGNITION, OR INCENTIVES THAT SHOULD BE PROVIDED THROUGHOUT THE PROFESSION FOR TARGET GROUPS, AS INDICATED BY PERCENTAGE OF RESPONDENTS, 1973

(Questionnaire item number VI.A. Column 2) N=150

REWARDS RECOGNITION INCENTIVES	TARGET GROUPS												
	All		Professionals		Para-professionals		Library technicians		Clericals		Trustees		Other(s)
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%
Pay raises	56	1	65	2	65	1	65	1	64	1	56	2	0
Promotion	53	2/3	69	1	63	2	61	3/4	62	3	53	4	1
Status symbols	30	9	34	10	32	10	31	10	31	10	30	10	0
Creating a stimulating job	53	2/3	63	3	62	3	63	2	63	2	59	1	1
Job security	41	5	47	5/6	47	5/6	47	5/6	45	5	41	5	0
Fringe benefits	36	7	41	7/8	39	7/8	39	8	39	7/8	40	6	0
Freedom and autonomy	31	8	41	7/8	38	9	37	9	35	9	32	9	0
Giving certificate	29	10	39	9	39	7/8	43	7	39	7/8	34	8	0
Giving nationally recognized continuing education units*	37	6	47	5/6	47	5/6	47	5/6	43	6	39	7	1
Record of continuing education activity kept for each individual	52	4	61	4	61	4	61	3/4	61	4	54	3	0
Other	4	11	6	11	5	11	4	11	5	11	4	11	0

* The Continuing Education Unit (CEU) has been defined by a group of associations interested in the feasibility of a uniform unit of measurement for non-credit continuing education as follows: Ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction.

TABLE 34

Table 34 indicates the changes in recognition procedures that have occurred. The changes were broken down into "climate" changes and "structural" changes. Examining the total number of respondents, the group least inclined to employ recognition procedures was the national libraries group, and the group with the largest number of members employing recognition procedures was the regional library associations.

Of special concern is the finding that while 47 percent of the complete sample had attempted to alter the climate and 34 percent had attempted to alter the organizational structure in order to encourage continuing education, only seven percent had ever evaluated the effectiveness of recognition procedures. It should be noted that 8 of the 110 respondents elaborated on their answers to the evaluation question and stated that while the rewards themselves had not been evaluated, the employees' effectiveness was measured and evaluated.

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TABLE 34

RECOGNITION PROCEDURES AND ENCOURAGEMENT FOR CONTINUING EDUCATION IN ORGANIZATIONS, 1973

(Questionnaire item number VI. B. 1., 2., and 3.)

GROUP NAME	NUMBER AND PERCENTAGE OF ORGANIZATIONS THAT HAVE: Evaluated the effectiveness of recognition procedures			Attempted to alter the climate of the organization in order to encourage continuing education			Attempted to alter the organizational structure to encourage participants in continuing education activities		
	n	No.	%	n	No.	%	n	No.	%
Complete Sample									
Libraries--national	3	0	0	3	1	33	3	0	0
Library associations--national	17	2	12	18	5	28	16	5	31
Library associations--regional	4	1	25	4	4	100	4	3	75
Library associations--state	24	0	0	24	11	46	24	8	33
Library schools--accredited	27	2	7	28	17	61	26	7	27
State library agencies	35	3	9	34	17	50	34	10	29
Total number	110	8		111	52		97	33	
Total percentage			7			47			34
Partial Sample									
Libraries--academic	8	0	0	9	6	67	9	3	33
Libraries--public	9	1	11	9	7	78	9	4	44
Libraries--school	7	0	0	7	3	43	6	2	33
Libraries--special	6	1	17	8	4	50	5	0	0
Total number	30	2		33	20		29	9	
Total percentage			8			61			31
Library schools--unaccredited	13	1	8	13	6	46	13	6	46

TABLE 35

In terms of attitudes toward certification and re-certification, an overwhelming majority of the total survey (77 percent for certification and 69 percent for re-certification) were in favor of certifying and re-certifying as a means of maintaining the competence of library and information science personnel. However, it must be noted that the respondents' favorable attitudes toward certification were not without reservation. Comments made by the respondents seemed to imply certification was favored, but that there was doubt as to whether it could ever be implemented in a viable way.

A sample of the comments may help to give the reader an idea of the total range of feelings in relation to certification:

-- in favor of certification only if it "seems important to the individuals involved"

-- certifying would be "as impossible as ascertaining the quality of a librarian"

-- in favor of certification "if effectively restructured from present form"

-- depends on agency given responsibility for administering certification

-- in favor of certification "depending on the allowance for many routes to certification"

-- prefer a "competency-based -- not credential based" certification

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TABLE 35

ATTITUDES TOWARD CERTIFICATION AND RE-CERTIFICATION, 1973

(Questionnaire item numbers VI.B.4 and 5.)

GROUP NAME	ATTITUDES					
	In favor of certification			In favor of re-certification		
	n	No.	%	n	No.	%
Complete Sample						
Libraries—national	3	1	33	3	0	0
Library associations—national	19	14	74	18	11	61
Library associations—regional	4	3	75	4	4	100
Library associations—state	29	22	76	27	17	63
Library schools—accredited	31	24	77	31	26	84
State library agencies	38	32	84	34	23	68
Total number	124	96		117	81	
Total percentage			77			69
Partial Sample						
Libraries--academic	9	1	11	8	0	0
Libraries--public	7	4	57	5	3	60
Libraries—school	7	7	100	7	6	86
Libraries--special	7	1	14	7	1	14
Total number	30	13		27	10	
Total percentage			43			37
Library schools—unaccredited	12	9	75	12	8	67

APPENDIX C

LIST OF PERSONS INTERVIEWED

Lawrence A. Allen, Dean, College of Library Science, University of Kentucky, Lexington, Kentucky.

Alice Atanian, Worcester Public Library, Salem Square, Worcester, Massachusetts.

Larry X. Besant, Assistant Director, Public Services, Ohio State University Libraries, Columbus, Ohio.

Lee B. Brawner, Executive Director, Oklahoma County Libraries, Oklahoma City, Oklahoma.

Patricia Senn Breivik, Assistant Dean, Graduate School of Library and Information Science, Pratt Institute, Brooklyn, New York.

Anne S. Briley, Continuations, N.Y. Joyner Library, East Carolina University, Greenville, North Carolina.

Evelyn Brownlee, President, Society of Library and Information Technicians, Washington, D.C.

Frederick C. Burgwardt, Manager, Scientific and Engineering Training, XEROX, Webster, New York.

Martha Campbell, Government Documents Department, University of Colorado Libraries, Boulder, Colorado.

Dale B. Canelas, Associate University Librarian, Northwestern University Library, Evanston, Illinois.

Jennifer S. Cargill, Assistant Science Librarian and Assistant Professor, Miami University, Oxford, Ohio.

Robert Case, Director, School Library Manpower Project, American Library Association, Chicago, Illinois.

Genevieve Casey, Department of Library Science, Wayne State University, Detroit, Michigan.

Robert P. Cavalier, Director of Education, American Institute of Banking, American Bankers Association, Washington, D.C.

Mary Cevilla, Assistant Head, Circulation and Reserves, J. H. Myer Undergraduate Library, Stanford University, Palo Alto, California.

Ralph W. Conant, Director, Southwest Center for Urban Research, Rice University, Houston, Texas.

Evelyn Cornish, Librarian, Bellevue School System, Seattle, Washington.

Robert Donovan, Wyoming State Library, Supreme Court and State Library Building, Cheyenne, Wyoming.

Virginia Dowell, Director, New Britain Public Library, New Britain, Connecticut.

C. Edwin Dowlin, State Librarian, New Mexico State Library, Santa Fe, New Mexico.

Samuel S. Dubin, Continuing Education, The Pennsylvania State University, University Park, Pennsylvania.

Donald P. Ely, Director, Center for the Study of Information and Education, Syracuse University, Syracuse, New York.

Jacqueline Enequist, Public Library Consultant, State Library, Division of Library Development, Albany, New York.

Mary E. Feeney, Director, Francis A. Countway Library of Medicine, Boston, Massachusetts.

George Fischer, Chairman of the Board, Educational Materials Center, Chicago, Illinois.

Muriel L. Fuller, Chairman, Department of Communication Arts, University of Wisconsin-Extension, Madison, Wisconsin.

Pat Goheen, School of Library Science, Case Western Reserve University, Cleveland, Ohio.

Helen Goodman, Research and Special Projects Coordinator, El Paso Public Library, El Paso, Texas.

Tony Greco, Personnel Officer, University of California at Los Angeles, Los Angeles, California.

Mary Gregg, Sellwood Branch Public Library, Portland, Oregon.

Louise Gregie, Assistant to the Director, Office of Education, American Dental Hygienists Association, Chicago, Illinois.

Noel Grego, Librarian, Kennedy King College, Chicago, Illinois.

William Griffith, Associate Professor of Education, Department of Education, University of Chicago, Chicago, Illinois.

Cloyd Dake Gull, President, Cloyd Dake Gull and Associates, Inc., Kensington, Maryland.

Frederick L. Guthrie, Assistant Director of Continuing Education - Designate, The Catholic University of America, Washington, D. C.

Harold S. Hacker, Director, Rochester Public Library, Rochester, New York.

Ruth Hamilton, Manpower Consultant, Washington State Library, Olympia, Washington.

James Harvey, Executive Secretary, Illinois Library Association, Chicago, Illinois.

Peter C. Haskell, Assistant Director, Colgate University Library, Hamilton, New York.

Mary A. Heneghan, Regional Administrator, Eastern Massachusetts Regional Library System, Boston Public Library, Boston, Massachusetts.

Peter Hiatt, Director, Continuing Education Program for Library Personnel, Western Interstate Commission for Higher Education, Boulder, Colorado.

Doralyn J. Hickey, University of North Carolina, School of Library Science, Chapel Hill, North Carolina.

Elizabeth P. Hoffman, Director, Division of School Libraries, State Department of Education, Harrisburg, Pennsylvania.

Arlene Hope, Library Services Program Officer, Department of Health, Education and Welfare, Boston, Massachusetts.

Ralph H. Hopp, Director of Libraries, University of Minnesota Library, Minneapolis, Minnesota.

Cyril O. Houle, Professor of Education, Department of Education, University of Chicago, Chicago, Illinois.

Edward N. Howard, Director, Vigo County Public Library, Terre Haute, Indiana.

Rutledge W. Howard, M. D., Associate Director, Department of Continuing Medical Education, American Medical Association, Chicago, Illinois.

Nelson Hoy, Director, Technology Information Exchange, Public Technology Inc., Washington, D.C.

Mary A. Huffer, Director, Natural Resources Library, Department of the Interior, Washington, D.C.

John A. Humphry, Assistant Commissioner for Libraries, New York State Education Department, Albany, New York.

Alice Ihrig, Board of Directors, American Library Trustee Association, Chicago, Illinois.

David Kaser, Graduate Library School, Indiana University, Bloomington, Indiana.

S. Janice Kee, Library Services Program Officer, Department of Health, Education and Welfare, Dallas, Texas.

Brigitte Kenney, Graduate School of Library Science, Drexel University, Philadelphia, Pennsylvania.

Mary Kay Kickels, Assistant Director, Education Programs, Educational Facilities Center, Chicago, Illinois.

Malcolm S. Knowles, Professor, School of Education, Boston University, Boston, Massachusetts.

Alan B. Knox, Director, Office for the Study of Continuing Professional Education, University of Illinois, Urbana, Illinois.

Miriam Larson, Department of Library Science, Wayne State University, Detroit, Michigan.

Leo L. Leveridge, M.D., Assistant Director, Department of Continuing Medical Education, American Medical Association, Chicago, Illinois.

W. Alfred McCauley, Vice President, Natresources, Inc., Chicago, Illinois

Clarke W. Mangun, Jr., M.D., Assistant Director of Continuing Medical Education, American Medical Association, Chicago, Illinois.

John Manley, Project Director, Continuing Education Registry, American Dental Association, Chicago, Illinois.

Nancy March, Librarian, Rockville Public School System, Rockville, Connecticut.

Donald E. Marlowe, Vice President for Administration, The Catholic University of America, Washington, D.C., and Past-President, American Society of Mechanical Engineers.

Harry Martin, Assistant Law Librarian, Tarleton Law Library, University of Texas, Austin, Texas.

McKinley Martin, Instructor, Coahoma Junior College, Clarksdale, Mississippi.

Virginia H. Mathews, Library Consultant, Stamford, Connecticut.

Ed Miller, School of Library and Information Science, University of Missouri, Columbia, Missouri.

Phyllis Mirsky, Biomedical Library, University of California at Los Angeles, Los Angeles, California.

Marion Mitchell, Executive Secretary, Southwestern Library Association, Dallas, Texas.

Kathleen Molz, Research Associate, Institute of Urban Studies, University of Houston, Houston, Texas.

Margaret E. Monroe, Library School, University of Wisconsin-Madison, Madison, Wisconsin.

Stefan Moses, Executive Director, California Library Association, Sacramento, California.

LeRoy William Nattress, Jr., Ph.D., President, Natresources, Inc., Chicago, Illinois.

James A. Nelson, Director of Continuing Education, University of Kentucky, Lexington, Kentucky.

Gary Nichols, Director, Library Development Services, Maine State Library, Augusta, Maine.

A. Chapman Parsons, Executive Director, Ohio Library Association, Columbus, Ohio.

John A. Rhodes, Jr., Associate Vice President for Public Service, Georgia State University, Atlanta Georgia.

Barbara Robinson, Information Specialist, Public Technology, Inc., Washington, D.C.

Stuart Rose, Director of Continuing Education, American Institute of Architects, Washington, D.C.

Victor Rosenberg, Chairman, Education Committee, American Society for Information Science, Berkeley, California.

Carmela Ruby, Library Consultant, California State Library, Sacramento, California.

Don W. Schneider, Undergraduate Head, University of North Carolina Libraries, Chapel Hill, North Carolina.

Vivian Sessions, Center for the Advancement of Library and Information Science, New York, New York.

Russell Shank, Director of Libraries, Smithsonian Institution, Washington, D.C.

Henry G. Shearouse, Jr., Director, Denver Public Library, Denver, Colorado.

Joseph F. Shubert, State Librarian, Ohio State Library, Columbus, Ohio.

Charlotte Smith, Assistant Director of Program Development and Research, American Society for Medical Technology, Bellaire, Texas.

Eleanor T. Smith, Library Services Program Officer, Office of Education, Region II, New York, New York.

Joshua I. Smith, Executive Director, American Society for Information Science, Washington, D. C.

Lotsee Smith, Associate Professor, Department of Library Science, University of New Mexico, Albuquerque, New Mexico.

Robert Steuart, Dean of Continuing Education, Graduate Department of Library Science, University of Denver, Denver, Colorado.

James G. Sucy, Director, Educational Development for the Marketing Education Center, Eastman Kodak Company, Rochester, New York.

Peggy Sullivan, Director, Office for Library Personnel Resources, American Library Association, Chicago, Illinois.

Janelle Turner, Audio Visual Department, District of Columbia Public Library, Washington, D. C

Alphonse F. Trezza, Director, Illinois State Library, Springfield, Illinois.

Travis E. Tyer, Consultant, Professional Development, Illinois State Library, Springfield, Illinois.

Kenneth E. Vance, Assistant Dean, School of Library Science, University of Michigan, Ann Arbor, Michigan.

Ann White, Acting Task Force Coordinator, Curriculum and Instructional Product Development, The National Center on Educational Media and Materials for the Handicapped, Columbus, Ohio.

Susan Lundberg Wick, Coordinator, Orange County Public Library, Orange, California.

Billy R. Wilkinson, Staff Relations Officer, New York Public Library, New York City, New York.

Mary Williams, Librarian, Pomfret Community School, Pomfret, Connecticut.

Matthew R. Wilt, Executive Director, Catholic Library Association, Haverford, Pennsylvania.

Blanche Woolls, Assistant Professor, Graduate School of Library and Information Science, University of Pittsburgh, Pittsburgh, Pennsylvania.

Kieth C. Wright, Librarian, The Edward Miner Gallaudet Library, Gallaudet College, Washington, D. C.

Diane K. Youn, Assistant Dean and Director of Admissions, Law School, The Catholic University of America, Washington, D. C., and Associate Conference Director, Conference on Continuing Legal Education and Law Schools, October, 1973.

Martha Jane K. Zachert, College of Librarianship, Davis College, University of South Carolina, Columbia, South Carolina.

APPENDIX D

ALTERNATIVE MODELS

APPENDIX D

CRITIQUE OF THREE ALTERNATIVE ORGANIZATIONAL MODELS FOR A NATIONAL PLAN FOR CONTINUING LIBRARY AND INFORMATION SCIENCE EDUCATION

Just as the CLENE model presented in the body of the text was presented to various audiences, the three alternative models presented in this section were submitted for reaction and comment to a number of people knowledgeable in the field. The difference in treatment is that the suggestions made about the CLENE model that were deemed feasible by the Project team were incorporated in that model, while the suggestions relative to the three alternative models were not incorporated into the models but are rather presented as comments after each model. Also it should be pointed out that numerous features of these models which were favorably received by those who reacted to them were incorporated into the CLENE model.

The comments concerning these models taken as a whole are summarized on this and the following page; · the specific comments about each of the three models follows each.

CRITIQUE OF THREE ALTERNATIVE ORGANIZATIONAL MODELS FOR NATIONAL CONTINUING EDUCATION

The models present interesting and stimulating alternatives for providing a national continuing education program. However, as presented, they seem to share an indirect attachment to the present status of continuing education with a built-in resistance to substantial organizational change.

The models, particularly one and two, emphasize the advantages of all interested persons participating in the development of the national continuing education effort. However, these models do not seem to recognize that essentially this is what is happening now. The question is, then, whether it does much good to formalize the existing informal process, or whether a new kind of organizational effort is needed. Little or no structure will probably satisfy all segments of the library community; but it is necessary to provide leadership which can find appropriate and continuing ways of determining the most important needs and work toward responding to them.

The main area of difference between the three alternative models and the CLENE model relates to the role of the national body. The CLENE model presents a national group with broad responsibility in the areas of information exchange, needs assessment, program development, and provision of service. The alternative models diminish that role in favor of retaining local control and developing grass roots programs. However, it should be pointed out that the CLENE model includes processes for broad participation in both advisory and implementation modes. Local initiative and needs have to date played a dominant role in continuing education. In funding this Project, it was the view of the National Commission on Libraries and Information Science, based on expressions of need at its regional hearings, that there is a need for a strong, established, coordinated nationwide effort. The Project presents a model that provides for leadership on a nationwide base, without precluding local participation. It is also apparent that the national program would have to be responsive to local needs or it simply would not survive. Thus, it seems unlikely that the effort would be arbitrary or responsive only to "vested interests" -- a fear which seems to be implied in each of the models. The nationwide program; would have a responsibility to encourage local participation, but it would play a leadership role.

It must be recognized that the current library continuing education effort is weak; if this were not the case, there would be little need for this report. But the fact is that local and regional programs have not had the broad impact which is desirable. This is not to say that they have failed; rather that their financial and organizational constraints have limited the potential of these efforts. It is also clear that these efforts should and would continue. They would, however, be promoted by CLENE; and their efforts would be augmented by programs developed by CLENE.

While this issue of the proper role for a national agency vis-a-vis the multitude of local, regional, and individual interests is the essential organizational difference between CLENE and the three alternative models, it is perhaps useful to discuss, briefly, each of the three models.

MODEL 1

The Rationale:

This model is able to be implemented quickly and at a moderate cost. It can start from either the national or regional level--or from both simultaneously. It rests on two supports: the present regional CE strengths and activities (shown by the Southwest, Northwest, and Northeast) together with nationally (NCLIS) designated priority and visibility for Continuing Education.

State and local CE initiatives are encouraged by legitimizing their cause (CE), by assuring recognition of their statements of need, and by identifying resources to be tapped. Program designs, materials, and evaluative data go to regional and national clearinghouses to assure that other areas with similar needs can have access to that material.

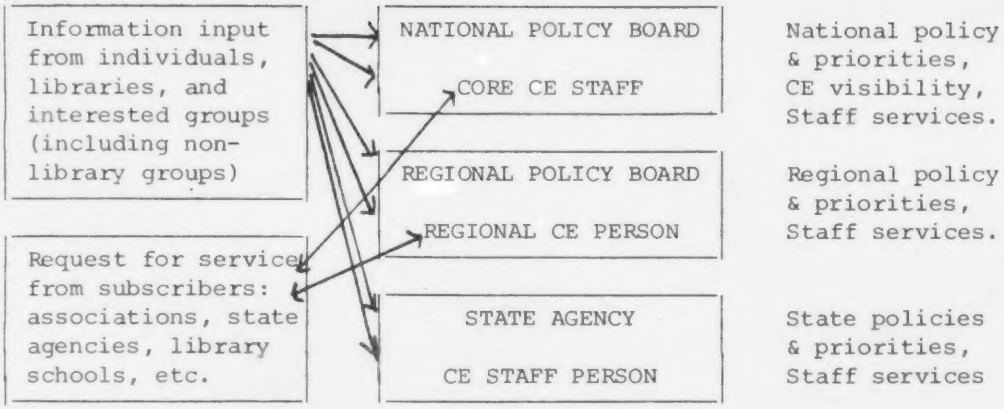
The local level is close to the need and can "read" the situation best. Local initiative gets response and backup help from the other levels. Weaker states are joined with stronger ones in a region. The former would rely more heavily on regional help as they strengthen their CE interest and capability. Stronger states could sustain their own pace of activity, but could also benefit from regional level help.

The national level gives direction and leadership for evolving broad CE goals, and for dealing with issues of national import (*e.g.*, certification, program evaluation, etc.) The Core Staff provides services to regional CE personnel and subscribers to its services.

The model builds from and retains a broad base of shared responsibility for direction and decisionmaking for both policy and action. It provides for the reality of local and state diversity and assures the right of autonomous activity. It offers opportunities for maximum involvement of all relevant and interested groups.

The interaction of structures generates pressure which prompts and sustains local initiative. At the same time, the interface increases CE capability--enabling quality programming without losing local decisionmaking.

The Picture:


Information input from individuals, libraries, and interested groups (including non-library groups)
Request for service from subscribers: associations, state agencies, library schools, etc.
NATIONAL POLICY BOARD
CORE CE STAFF
REGIONAL POLICY BOARD
REGIONAL CE PERSON
STATE AGENCY
CE STAFF PERSON
National policy & priorities, CE visibility, Staff services.
Regional policy & priorities, Staff services.
State policies & priorities, Staff services

How It Works:

The National Policy Board is composed of representatives from all national professional library associations plus individuals representing related fields of media, adult and continuing education, etc. It meets twice a year to determine CE goals and major directions recommended for the field. Considering other national planning and development in process, it suggests priority needs for CE in the field. Each member has liaison responsibility with the group represented but speaks from a personal perspective in Board actions. Information about National Policy Board recommendations is widely disseminated through the library literature. Meeting costs are federally funded but Board members serve without fee.

The Core Staff is responsible for maintaining a clearinghouse of resources--people, materials, and facility information that can be tapped by subscriber groups. Its quarterly publication has a calendar of opportunities, information about regional activities, and services available from the Core Staff. It provides training opportunities to regional and state level CE people in such areas as program planning, educational, and evaluative methods.

Support of these services comes from subscriptions from state agencies, professional associations, library school programs, and sizable libraries who make use of the services. In the case of some library associations, a proportion of member dues is earmarked for CE.

The regional level is made up of several states--in some cases this is a regional professional association; in other instances, it is an interstate compact of state agencies. The Regional Policy Board is made up of representative relevant groups, including lay members. It establishes regional priorities and directions and plans for the implementation of national policies that affect the region.

The regional CE staff person is the prime channel and connector for needs and available resources within that area, and provides a spark to encourage CE activities that connect them. "How to" kind of assistance is available for help in planning CE programs, in seeking sponsors, or funding sources for needed programs. From that perspective, the regional CE staff person offers input to the national level regarding needed services that would be best offered at the national level to further CE opportunities. Staffing at the regional level would be appointed and funded by whatever regional body or bodies assumed the responsibility.

State agencies and associations have a person responsible for CE who serves to identify needs unique to their locale and interest and who would coördinate that organization's CE efforts with those of other states in the region. Pilot programs might be launched at state level before being produced throughout the region.

Libraries, information centers, and individual personnel are able to have access directly to the state level with requests for information on programs that would meet their need. In order for regional or national levels to get information or service, the request has to go through a subscriber. Subscriptions to regional services can be held separately from a national level subscription. Participation in programs is funded by sharing the costs by individual and the employer, although some programs might be subsidized to reduce that amount.

Information from all sources (individuals or groups) has an open channel *to* any level to state needs, offer ideas and suggestions, or to be considered as a resource. Information *from* various levels is more structured. At the national level, the Core Staff responds to requests for services from subscriber groups only. At the region, the CE person provides regional services (clearinghouse information, educational packages, consultation) for minimum fees.

Critique of Continuing Education Alternative Model Number 1

Model Number 1 rests on two supports: existing regional continuing education strengths and nationally designated priority and visibility for continuing education. These supports have some weaknesses. The regional programs have not yet impacted the total profession in any broad way and the national commitment is helpful but could support any model as well as this one. The model speaks of "local initiative" but fails to point out that it has been inadequate to the present time and that there is very little reason to believe it will suddenly improve without strong central support. It also implies, perhaps unintentionally, that continuing education needs vary geographically rather than by type of library. Perhaps the main reason for the emphasis on local activity is the model's concern with retaining local decision-making. It apparently would have no responsibility for program design and development. As presented, it appears that continuing education efforts would continue to be fragmented, duplicative, and used only minimally.

The National Policy Board in this model would meet two times each year and develop national goals but appears to have no operating body to work toward achieving these goals. Rather, these broad statements would simply be disseminated widely in the hope that something would happen on regional and local levels. The Core Staff is defined to operate in a somewhat passive mode responding to individual inquiries about continuing education resources. As presented it appears that continuing education efforts might continue to be fragmented, duplicative, and used only minimally.

MODEL 2

The Rationale:

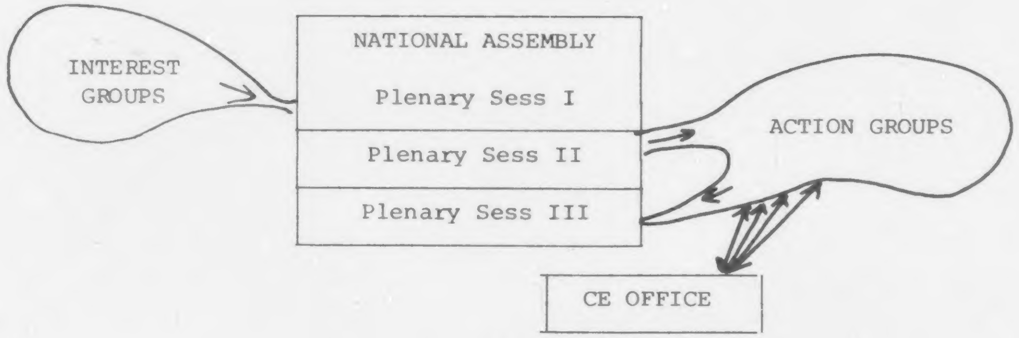
This model is an issue-oriented model rather than a service delivery system. It offers a national approach to CE at the level of issues, offering the possibility of a national pattern, direction, and guidelines, but leaves control and action to local levels or national groups that might want to make that kind of commitment. It provides for resolution of important issues through action at the same time as working toward achieving a consensus in the field. It gives visibility to CE as a prime professional concern.

The model provides CE opportunities by providing direction, planning, and action wherever the interest and initiative are sufficient to get the effort off the ground and maintain it. Thus, it serves as an automatic culling system that does not waste effort on marginal objectives or those that are not well timed.

The model rests its base on a platform of concerned people--with the structure built to emphasize and accommodate broad participation and deep involvement. The motivation for action is the high degree of interest in people working on "their own thing" and the deep level of personal communication, shared responsibility, and conviction.

The model provides the opportunity for new and dynamic CE leadership to emerge alongside the "regulars" already in the field. It is a training ground to improve capabilities of the interested and concerned to learn to lead the way and to back that up with committed followthrough. Vested interests might be predominant, but the required openness of the system would prevent control by narrow interests.

The Picture:



Action group strategies and efforts will link CE issues with national, regional, state, and local CE activities.

How It Works:

Once a year, a National Assembly for Continuing Education convenes in Chicago. It consists of self-selected individuals concerned with CE in the field of library and information science. During its 3-4 day conference, the forum deals with national CE goals and objectives and considers major issues which relate CE to the professional field. Issues such as certification, criteria for learning packages, and the Continuing Education Unit (CEU) would be dealt with.

There is no "membership" or official representation to the Assembly. Those who come include the vested interests (state agencies, professional associations, etc.) and interested "self-starters." The forum encourages input and participation from all areas and levels within the field and from related fields of media, training and development, education, the learning industry, publishing, etc. Annual meetings are given the widest national publicity.

The Assembly provides a framework which facilitates both information and action. The opening plenary session exchanges information, bringing out various sides of issues, selecting the priority for those of prime concern to the attendees, and forms interest groups around each. Interest groups--individuals with a common concern--meet, exchange more in-depth information and perspective, address the issue, and hammer out objectives, guidelines, and recommendations for action.

These interests then go before the second plenary session which serves to display information and recommendations of each interest group. The issues would, at that point, be seen within a national context (alongside other issues) and would be able to be redefined and given new priorities. Tentative planning directions emerge and action groups are established for the high priority issues.

These action groups then convene, define their objectives in the light of the national planning directions, and design a strategy of action to accomplish those objectives. In addition to planning the strategy, the action team assumes the responsibility for initiating and following up on their plans. This requires definite and clear-cut commitments to assure subsequent activity.

Action plans and commitments are presented at the final plenary session of the Assembly where they are linked with action plans from other groups to connect efforts, resources, and information into what become the national CE directions for that year. Acceptance by the plenary session would serve to sanction these issues as national CE priorities. Outcomes from the Assembly are widely publicized in both the library and lay press.

A specific example in the above process might be helpful: Library school educators (perhaps some present members of CLENE) who are interested in CE becoming an integral part of library school curriculum raise and discuss this issue the first day of the Assembly. Then they form an interest group, open to others who find that issue of interest. There they would define the objectives of such an effort, establish parameters and guidelines, and formulate recommendations. This would be presented to the second plenary session.

The total group (plenary session) might endorse the importance of the issue in the national picture, and make suggestions to be considered in modifying the objectives and recommendations. Then an action group (some of the interest group members together with new people) would refine the objectives, work on strategies for action, and make commitments for implementing those strategies.

For example, they might decide to pressure ALA to include CE in the new standards and to alter COA policies to encourage library school CE efforts. They might decide to send library educator teams to state and regional conferences to do CE programs in order to increase utilization of faculty as CE resources in the state and region.

A CE Office, housed in but not directed or funded by ALA, is the administrative arm for the Assembly. It facilitates both information and action. It serves as a touch point, a continuum, and a resource for what is going on. It is closely in tune with priority issues, leadership, and background from Assembly. It is responsible for the logistics of the Assembly meetings.

It acts as a switching and referral center for requests for information from individuals and groups about available resources--people, packages, etc.--for CE efforts. The information base would come from voluntarily submitted reports channeled through state agencies, associations, library schools, etc., on uniform forms. A list of upcoming workshops and institutes, newly developed learning packages, commercial projects, and newly forming interest groups in preparation for the Assembly meetings is disseminated to publishers of library literature at national, regional, and state levels for publication in their journals.

To facilitate action, the CE Office provides support services to the action groups to assist them in communication and followthrough capabilities. It also continues to link relevant efforts by the various action groups as they carry out their action plans. It seeks to involve new people and groups in CE--promoting their attending the National Assembly, affiliating with the Action Groups, or being a resource reporting on CE activities.

Action groups are charged by the Assembly with the implementation of their action plans and are accountable each year to report. They continue to incorporate new people, and plan a year's strategy even if the objectives were aimed at a five-year program. They correspond, meet, and plan throughout the year as necessary.

Funding for this model is very difficult to anticipate. The National Assembly might be feasibly underwritten federally and might even, in the manner of conventions, be able to fund itself. Much of the local level action would be contributed by individual and institution efforts and materials. The CE Office, responsible for many of the overhead expenses and duties, would be difficult to fee-base when so much local volunteer efforts are being called for.

Critique of Continuing Education Alternative Model Number 2

This model seems to add only an annual National Assembly on Continuing Education to the status quo. It relies on "concerned people" and local interest and initiative to begin and maintain continuing education programs. The National Assembly has no authority and no funds, and must rely on volunteer "action groups" to accomplish anything. While the profession has a large number of capable, dedicated professionals, it is unlikely that a number of action groups would produce appreciable results without funding, a strong permanent support staff, and on-going coordination and accountability. It is, in a sense, no organization at all. Rather, it is an annual happening, followed by groups doing their own thing with no formal legitimacy as operating groups. Again, the Continuing Education Office role is seen as basically passive, with no real planning or program responsibilities. The disadvantage with this model is that nothing will really happen without a stronger core staff and substantial funding, the first of which is not desirable according to the model, the second of which might be unattainable for such a seemingly loosely organized program.

MODEL 3

The Rationale:

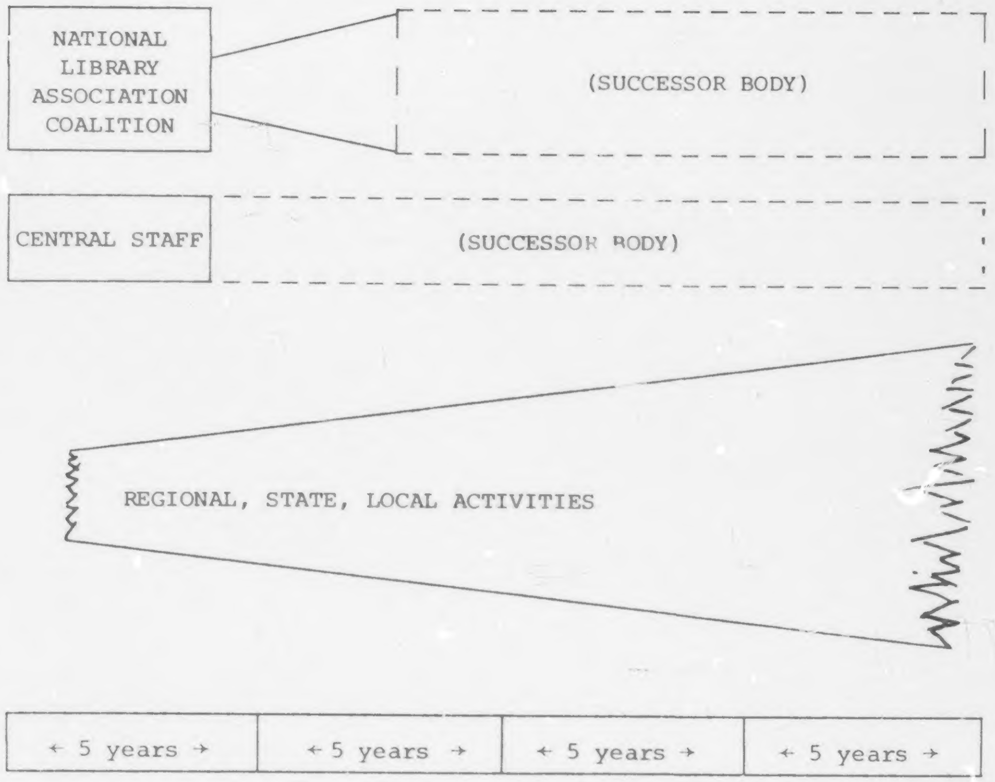
This model employs centralization as a mode at the national level to gain visibility for CE and credibility for it as a priority in the field. It employs decentralization at all other levels where the CE activity actually takes place. This acknowledges the current diversity (needs, governance, sophistication) and present levels of activity. Guidance and recognition of CE comes at the national level, but not with regulation.

The model is aimed at building the ability and desire to coöperate at the national level. This is necessary to produce meaningful CE leadership, direction, and policy. It is also necessary to present a cohesive and fundable plan for a CE service delivery system.

This is a phased program designed to involve the professional power structure and prompt it into action on CE. It relies on the credibility of that power structure to lend weight to subsequent efforts aimed at building a national capability to give direct assistance to CE programming at all levels. At the same time, it does not thwart regional, state, and local efforts now being done--rather, it adds "respectability" and sanction to their efforts.

Since all that follows will depend on the first phase, it is difficult (impossible?) to predict. One possible series of action is outlined below.

The Picture:


NATIONAL LIBRARY ASSOCIATION COALITION
(SUCCESSOR BODY)
CENTRAL STAFF
(SUCCESSOR BODY)
REGIONAL, STATE, LOCAL ACTIVITIES
← 5 years →
← 5 years →
← 5 years →
← 5 years →

How It Works:

The National Library Association Coalition consists of official representatives of all national professional and paraprofessional associations in the field of library and information science. It has a predetermined life of five years during which time it is to build a working relationship (focused on institutional ability as well as personal ability). Its task is to devise a CE blueprint for the field which will be in accord with the aims of the professional associations. The Coalition is also, during that time, to design its own successor as a policymaking body, responsible for long-range planning at the national level to assure CE opportunities are increased and improved within the field.

A Central Staff is the administrative body which, during the first five years, serves the needs of the National Library Association Coalition--needs for information, research, recommendations, and public relations. It also seeks for funding sources for the next phase, based on the decisions and directions from the Coalition.

During this time, the Central Staff begins to build its relationships with the states and regional groups and to collect and service an information bank of CE resources--people, materials, and programs that are being done, etc.

Near the end of the initial five-year period, the Central Staff will gear up the clearinghouse on a very active basis, profiting from the experience and contacts during the first five years. It will charge fees for servicing information requests or will allow "credit" in exchange for program materials put into the system. It will publicize its services widely and plan a training program for the CE people appointed from the state and regional associations.

One of its main functions will be as a backup for the CE person at the local levels in helping develop, adapt, and evaluate programs. For the services it cannot supply directly with its own staff skills, it will refer consultants to give assistance.

The state and regional associations are responsible for developing and producing fee-based programs tied with an ongoing needs assessment process. These programs are sometimes put on solely by the association and sometimes cosponsored by a state agency or library school program in the area. Usually the CE state person helps to coördinate the initial stages of a program to get it going and to assure that the needed resources are found and used.

Each state and regional association will designate CE as a priority (following the national level lead) and will appoint a CE person not as an official on a rotating basis, but a permanent, staff-like position, even if only part time. Each state and regional association will put together a "talent bank" of resource people in the area--from library and audiovisual, adult education, training and development fields--for local use in CE programming.

Initial funding requires federal underwriting. Matching funds come from each national association that wants to be a part of the effort. The programs, once under way, bring in fees. Fees would be charged for information or services from the Central Staff.

The "first step" could come by NCLIS initiating a request for the national associations to form a Coalition.

Critique of Continuing Education Alternative Model Number 3

Of the three, this model has the most potential for developing a strong continuing library and information science education program on a nationwide basis. However, five years seems somewhat long for the National Library Association Coalition to determine what its successor body might look like. Additionally, it would seem that the Central Staff should be able to gear up an information clearninghouse in one or two years at maximum. There is a danger that were the model to be strictly followed, the program would lose momentum during the five year planning period.

This model, like models one and two, de-emphasizes the role of the national continuing education office and again leaves all major program responsibilities to state and regional associations and assumes that each of these will develop strong operational capabilities. Therefore, this seems to put us back where we were, relying on programs that have frequently not been effective and/or available on a national basis -- or in some cases, on a local or regional basis.

APPENDIX E

ASSOCIATION OF AMERICAN LIBRARY SCHOOLS
COMMITTEE ON CONTINUING LIBRARY EDUCATION

AALS POSITION PAPER ON CONTINUING LIBRARY EDUCATION FOR SUBMISSION TO OTHER RELEVANT AND INTERESTED GROUPS

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INTRODUCTION

Present day developments, including changes in our society, the accelerated growth of new knowledge, the implications of new technology, and the increasing demands for additional or changing types of library, information and communication services, support the assumption that continuing library education is one of the most important problems facing librarianship today. In recognition of these societal changes and increased demands for professional services, the library and information science professions should adopt a vigorous role in providing opportunities for continuing education for the profession.

BASIC ASSUMPTIONS

1. Need for Continuing Education

   A. Continuing education is essential for all library personnel, whether they remain within a position category or are preparing to move into a higher one. The best library education can become obsolete in a few years, unless the librarian makes a very determined effort to continue his or her education.

   B. The gap between knowledge and application grows wider for several reasons: rapid advances in research; unequal distribution of opportunities for continuing library education; patterns of educational opportunities and of dissemination of knowledge which are not efficient in terms of the librarian-student's needs.

2. Objectives of Continuing Education

   A. Any continuing education program in librarianship should aim toward the total improvement of the individual with specific attention to his or her development in the following categories: personal growth, improvement of basic professional skills, acquisition of new skills, and attitudinal changes.

3. Content of Continuing Education

A. Programs that are developed should be based on educational needs as expressed by the profession and take into consideration societal, professional and individual requirements:

   (1) Diversity of job and career related programs -- Program should be developed in enough breadth and depth to meet career needs in differing career levels.

   (2) Continuity of programs - Librarian-student should be able to build an individualized program from various sources in which each learning experience builds upon the previous one.

   (3) Convenience and accessibility -- Programs should be accessible to all librarians, regardless of geographic location, type of library, or position within the library.

   (4) Personal satisfaction.

B. Techniques and methods exist to meet the individual librarian's requirements for continuing professional education through his or her career. Existing knowledge and tools from the fields of library science and information science, educational technology, the behavioral sciences, management, and others are available, and should be used to the fullest advantage.

C. In planning and developing programs the continuing education experiences and resources of other professions should be studied and adopted and/or adapted when feasible.

D. Any program developed should be based on an evaluation of what continuing education programs exist today and how well they are meeting the needs.

E. Constant evaluation should be made and new research and developments in librarianship and related fields should be constantly incorporated into the overall program.

4. Organizational Structure for Continuing Education

A. The complexity of the problem demands that any vigorous planning for continuing education for librarians will, at a minimum, call for coordination and cooperation among five components: individual librarians; state or provincial, regional and national library and information associations; library schools, the libraries, and state or provincial, regional and national agencies.

B. The problem is of international dimension, and the best solutions can only be found through coordinated planning. An organizational structure is needed which facilitates communication, insures cohesion of efforts, and insures a balance that can articulate effectively individual, local, state or provincial, regional, and national programs.

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